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THE MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, Rural Economy & Mechanic Arts.

Vol. 6.

BALTIMORE, APRIL, 1869.

No. 4.

THE LIMIT OF IMPROVEMENT IN PLANTS AND ANIMALS BY SELECTION.

Most persons have heard of the Darwinian theory as to the variation of animals under domestication, and yet very few have any but the vaguest ideas of its character and scope. This theory enunciated by him years ago attracted at that time much attention and gave rise to a long and animated controversy. By many it was pronounced, in regard to the conclusions which he drew from it, extremely wild and visionary, but some few of the ablest scientists, especially of Germany, heartily accepted and have since endeavored, by elaborate works, to maintain the truth of Darwinian hypothesis. It was easy, however, to see from the first that if Mr. Darwin wished to firmly establish the position he had assumed, there was much uphill work before him. Undeterred, however, by hostile critics he has continued to advance his favorite views, and has lately published two good sized volumes under the title of "Plants and Animals under Domestication." The aim of Mr. Darwin is to prove that as plants and animals under the care of man have been so modified as to produce variations, breeds, and sub-breeds of the same species, so also in their wild state and in the course of time similar changes must have occurred by natural selection, and of the varieties which thus arose those best suited to the condition of life in which they were placed continued to exist and to be transmitted. He asserts, that this power of modification is subject to no limitation but that it extends even to the production of distinct races. The process by which this has been effected he assumes to have been slow and gradual. The man, for instance, who first preserved a pigeon with its oesophagus a little enlarged, its beak a little longer or its tail a little more expanded than usual, made the first step in the creation of the Pouter, Carrier, or Fan Tail Pigeon. Afterwards the abnormal qualities thus existing were transmitted to the offspring, and thus came these particular breeds. Length of time, however, he contends, is all important for this. Each character to become strongly distinctive has to be augmented

by successive variations of the same kind, and this can only be effected during a long series of generations.

Length of time will also allow, argues Mr. Darwin, any new feature to become permanent by the continual rejection of those individuals which revert or vary, and the preservation of those which inherit the new character. Hence, although some few animals have varied rapidly in certain respects, under new conditions of life, as dogs in India and sheep in the West Indies, yet all the animals and plants which have produced strongly marked races were domesticated at an extremely remote epoch, often before the dawn of history. As a consequence of this no record has been preserved of the origin of our chief domestic breeds. Even at the present day new strains or sub breeds are formed so slowly that their first appearance passes unnoticed. A man attends to some particular characteristic, or merely watches his animals with unusual care, and after a time a slight difference is perceived by his neighbors. The difference goes on, being augmented by unconscious or methodical selection, until at last a new sub breed is formed, receives a local name and spreads. But by this time its history is almost forgotten. When the new breed has spread widely it gives use to new strains and sub breeds. The best of these succeed and spread, supplanting other and older breeds, and so always onward in the march of improvement. Such is Mr. Darwin's theory, and with great industry he has collected an immense array of facts to support it. These facts in themselves and totally irrespective of the ultimate purpose they were collected to serve, are worthy the attention of the farmer and breeder. They are both curious and instructive; are derived from a number of rare sources, to most persons difficult of attainment, and are apparently trustworthy. His reasoning on them does not, however, at all times carry conviction with it. The extreme point to which Mr. Darwin is prepared to push his views will be seen by the following sentence. It embodies the deduction he would have us draw from one of the most striking facts in the scheme of creation—the reign of a certain order and law of structure which prevails in

the simplest as well as the most complex forms. Darwin remarks:

"How inexplicable is the similar pattern of the hand of a man, the foot of a dog, the wing of a bat, the flipper of a seal, on the doctrine of independent principle of natural selection of successive slight variations in the diverging descendants from a single progenitor."

acts of creation! How simply explained is the If there is any one so credulous as to believe that theirs any probability in this position, a recent work, "The Reign of Law," by the Duke of Argyle, will, we think, very readily dispel any doubt on the subject. Mr. Darwin has a hobby, and like many other men before him, has become infatuated with it and has gone farther than sensible men will be inclined to go low.

There is, nevertheless, in Mr. Darwin's volumes a profound research into the nature and condition of life of plants and animals, the cause of their variability, the laws which govern these changes, such as food and climate; the essentiality or non-essentiality of different organs and functions, and the degree of change of which domestic organisms are susceptible. No one denies to Mr. Darwin the merit of a profound knowledge of the subjects on which he has undertaken to treat, or underates the importance of the data he has so laboriously collected. His facts relate to matters, the profit of investigating which will be seen at a glance when we remember that by judicious selection the English race horse, the American trotter, and the improved breeds of domestic cattle have been produced. Independent of any theory, a knowledge of the laws that govern the transmission of particular traits, or of a peculiar type of form and structure is of incalculable value. In search of his data Mr. Darwin ranges over a wide field and devotes chapters to domestic dogs and cats—horses and asses—pigs, cattle, sheep, goats—domestic rabbits—domestic pigeons, fowls—duck, goose, peacock, turkey, guinea fowl, canary bird, gold fish—hive bees, silk moths—cultivated plants, cereal and culinary—fruits, ornamental trees and flowers—on bud variations, and on certain anomalous modes of reproduction in variation—on breeding and inheritance—crossing and hybridizing—on sterility and its causes—and on selection.

These different subjects undoubtedly furnish much food for serious thought—Mr. Darwin establishes his propositions so far as relates to a wide variation of species, and also the manifest and evident production, by time and selection, of a higher type in many of our domestic animals and plants. He also discusses the causes of sterility, as well as "crossing," "hybridizing," &c.

It is of some concern to us to trace, even upon hypothesis, the possible descent of our animals either

from a common ancestor, or from some supposed intermediate type among wild beasts as in the case of the dog, whose origin is said to be derived from the wolf and the jackal—Mr. Darwin endeavours to point out many of the connecting links, and in doing this he necessarily elucidates many facts in relation to the variations, breeding and changes among animals from remote ages. Whatever may eventually be thought of his theory, he gives it to the world in such a manly sort of way, and fortifies it with such a multiplicity of details that even those who deny his conclusions and are disposed to charge him with irreverence do not hesitate to do justice to the great value of his work in other respects.

Smut in Wheat—How to Prevent.

In a late number of the *Prairie Farmer* some inquiry was made as to whether lime is a preventive against smut in wheat. My experience tells me that lime of itself would be of little use were it not combined with the solution of salt. I will give my method of preventing smut, which has never failed.

Save as much chamber-lye as will thoroughly saturate the quantity of wheat you may wish to sow, then for every ten bushels of wheat add two ounces of arsenic dissolved in rain water, spread the wheat on a level floor, then take a broom and dip it in the mixture, shaking it over the wheat until there is sufficient to wet the whole. Shovel it over once or twice, until you are satisfied that it is all soaked alike, then sift over it a thin coat of fine slaked lime; shovel over until the lime adheres to all the wheat alike. When it is ready for sowing, should there be occasion to wash the wheat in salt brine for the purpose of cleaning it, the dissolved arsenic may be added to a small quantity of chamber-lye and applied as above, after the salt brine has been thoroughly drained. Do not let the pickled wheat remain in the bags over night. I have tried this several times and have found it to accomplish the desired effect in all cases.—*Prairie Farmer*.

M. L. CURTIS.

THE HESSIAN FLY.—According to the editors of the American Entomologist, this pest of the wheat crop appears during the fore part of September, and disappears by the end of the month. Wheat sown so late that it does not come up until after its disappearance generally escapes its ravages. Farmers have found by experience that wheat sown early in September, is very liable to suffer greatly by the attacks of this little insect, which, laying its eggs about the lower joints, causes the stems to break off or grow unhealthily in the following spring time. Therefore it is not generally proper to sow wheat in this country before the 15th of September, although, theoretically, a better stand could be had by early sowing. The Hessian fly controls our operations in this respect,

NEGRO LABOR AT THE SOUTH.

In the last Agricultural Report published by the Bureau, at Washington, there is a very interesting account of the condition of agriculture in the cotton States, under the changes wrought by the war upon the labor system of that section. The people there, it is well known, have gone quite earnestly to work to endeavor to restore, as far as they may, their shattered fortunes; but one of the greatest drawbacks until recently, has been the want of pecuniary means. To ascertain the agricultural condition and most pressing need of those States, a series of questions was addressed by the Department of Agriculture, to different agricultural editors and planters, and the answers were generally full and often elaborate in the expression of individual opinions based upon personal experience and observation. From these we gather some valuable information. Of course, the primary inquiry, and the one upon which the greatest stress was laid, was the future prospect of the cotton crop under the new condition of free negro labor. The mode of cultivation, of course, remains the same as it was before the war, and "no radical changes in the order of this culture or in the general character of its processes is looked for, though positive and marked changes are highly desirable in promoting thoroughness and economy of culture." Persons hitherto unacquainted with cotton planting, it is affirmed, stand little chance of succeeding in it, though many, after a season or two of trial and sometimes of disastrous experience, learn the business and infuse into it new energy and elements of success. "There are," however, it is said, "other questions involving the management and economy of labor, improvements in farm machinery and enrichment of soils, upon which depend the profits of cotton production to a far greater extent than upon the order and peculiar mode of planting and cultivating." The average yield of cotton per acre is not more than one-fourth what the soil, rightly managed, is capable of producing. The wisest of the planters, indeed, are reaping substantial benefits from new appliances and by improving upon old processes. The masses, however, are following their example but slowly. A spirit of energy has, nevertheless, been awakened at the South which has already begun to yield valuable results. The minds of the planters are wakeful and active. They are casting about for the best and most rapid method of improving their condition. Intelligent and practical writers are publishing, through the press, advice and liberal ideas upon agricultural subjects. Emigration where it would be profitable is invited and welcomed. Artificial fertilizers are beginning to be used to a great and increasing

extent, and their comparative value, mode of application and results upon different kinds of soil, are more eagerly canvassed than ever before. But the most pressing problem with which the South has to deal is, after all, that of labor. The question as to whether free negroes will work steadily and continuously, is yet in course of solution. The opinion seems to be general that the negro would work in most cases, faithfully, if the matter were left between himself and his employer. Whilst negroes are excited, meddled with, and used for political purposes by the Northern whites, known as carpet-baggers, the result must continue to be pernicious in the extreme. Various modes have been adopted by the perplexed planters in trying to find the best manner of working the negro advantageously. Payment of wages was tried extensively in 1866, but generally proved unprofitable. Under this system "idleness became of a contagious and was of a more malignant type in proportion to increase of numbers working together. Crops were neglected, upbraidings and threats sometimes followed, and the cotton fields were, in many cases, left in the lurch at the season of picking." Renting was the next plan tried; the rent either being paid in money or a stipulated portion of the crop, usually one-third. That failed also. The most popular mode according to the correspondents quoted in the report, is said to be that of working on shares. Even under this method the improvident negroes have generally borrowed, bought or squandered, to the extent of their allotment, long before the crop was gathered. The Department acknowledges that the attempts of the negroes to cultivate the land on their own account, have with some very unimportant exceptions, been utter failures. It comes to the sound conclusion that it would be "unwise in view of the overwhelming evidence of their present unfitness to manage plantations, to advocate the undertaking of cotton planting, or even of general farming by the freedmen generally." The instances given under the head of failures to justify the above opinion, are certainly ludicrous; but are precisely what those who know the habits of the negro would have expected. We cite a few cases:

A colored man in Amity county, Mississippi, who had formerly managed successfully eighteen hands for his master, and who was deemed an intelligent and excellent manager, went to work with a force of seventeen hands, four being women and three youths. He rented fertile bottom land, agreeing to pay one-third of the product as rent. He bought of his landlord two mules, four horses, eight cows, and borrowed four yoke of oxen, a wagon, twelve hundred pounds of bacon, forty bushels of corn, three thousand pounds of fodder, and obtained credit for one thousand dollars. He obtained four

bales of cotton, raised no corn, fodder, or vegetables; both mules were dead at the end of the year, two horses were run off and sold, two yoke of oxen were reported dead, one yoke of oxen and two horses were turned over to the landlord so poor they could scarcely stand, no rent, or debts were paid, and five hundred dollars debt was further incurred.

Again. Such an occurrence as the following has been common: A planter who had furnished a yoke of oxen and a cart to a freedman who had four children, to help in his field, seeing him on his way to a neighboring village with a small load of wood, and knowing that his little cotton farm was rapidly going to grass, asked him—"How is this?" "Oh, I am out of tobacco and am going to town to sell a load of wood." His wife was housekeeping, and his four children had gone fishing. His cows brought him two calves but he lost both because he was too indolent to mow a small quantity of hay and pea vines.

Once more. The veteran Agricultural Editor, Dr. M. W. Phillips, of Mississippi, as the result of extensive observations, declares that the freedman may have a third, a half, or even an entire interest in a crop he is cultivating, and if any one will give for a week, or for a single day, more than usual wages in cash, he will leave the crop in the grass, and earn a few dollars to spend for some trifle that would only please a child.

Though we in Maryland and in the States farther South of us, have always known all this, yet we are glad to see the facts recognized in so authoritative a manner. Coming as they do from official sources, they may at least have a tendency to change the opinions entertained in regard to the negro by those who, whilst they attempt to legislate for him, are so utterly ignorant of negro nature and negro habits.

A USEFUL TABLE.—To aid farmers in arriving at accuracy in estimating the amount of land in different fields under cultivation, the following table is given by an agricultural contemporary: Five yards wide by 978 yards long contains 1 acre. Ten yards wide by 484 yards long contains 1 acre. Twenty yards wide by 242 yards long contains 1 acre.—Forty yards wide by 121 yards long contains 1 acre. Eighty yards wide by 60½ yards long contains 1 acre. Seventy yards wide by 69¼ yards long contains 1 acre. Two hundred and twenty feet wide by 198 feet long contains 1 acre. Four hundred and forty feet wide by 90 feet long contains 1 acre. One hundred and ten feet wide by 396 feet long contains 1 acre. Sixty feet wide by 726 feet long contains 1 acre. One hundred and twenty feet wide by 363 feet long contains 1 acre. Two hundred and forty feet wide by 181½ feet long contains ½ acre.

Our Agricultural Calendar.

Farm Work for April.

We are now coming to the time when spring brings gladness in its train, and all the fields and woods put on their vernal garniture and are vocal with life. The rigors of the ice-bound season are past, the streams no longer fettered flash out in brightness to the April sun. The early bulbs are beginning to show their fine green sheaths above the soil, and the crocus and the snowdrop, the first harbingers of the season, are giving to garden and lawn a new beauty. Presently the dainty white and purple anemones, the violet and the wild hearts-ease will gladden the sunny nooks of sheltered hill-sides, and before April slides into the lap of May, the cattle will be turned out to pasture, and the young grasses will be clothing the fields with their tender green. On the farm there is now much work to be done. In April the new season of operations sets in earnest. Already the oats in many places have been seeded, and now all the work preparatory to sowing barley or spring wheat, or planting corn, or seeding down to root crops has to be done. It is a busy time, for apart from the labor we have already indicated, there will doubtless be the heavy work of clearing the barn-yard and carting out its contents. There is, moreover much to do in the garden and about the farm steading in the way of cleaning up and making ready for those changes that the warmer months bring with them. Indeed, with many, the oat crop will yet have to be seeded, at the same time all the multifarious duties which are common to early spring will engage the attention of those who draw their living from the soil. On the farm the work to be done is as follows:

Seeding of Oats.

If this work has not yet been done, it should be pushed forward to completion at once. For all the details relative to the cultivation of this useful cereal, we refer to the Farm Work in the March number of the *Farmer*.

Sowing Lucerne.

Those who desire to put in an acre or two of Lucerne can now do so. Although a valuable green crop, and very productive after it has become well established in the soil, it has never been much used by our farmers, and even when tried has been too often neglected. Lucerne will last for many years, and with proper attention successive cuttings may be had of it from April to November. But it requires a rich soil to do well, and very cleanly culture.

Soil for Lucerne.—The best soil for Lucerne is a rich, deep, sandy loam, and the best exposure a slope

facing to the southward, or indeed any field well protected from sharp wintry blasts.

Preparation of the Soil.—As the roots of Lucerne strike deep, the ground should be ploughed to the beam, and where thorough work is to be done it should be subsoiled. The soil must be free of all excess of moisture, and should be either naturally rich or should be made so by a liberal use of manure or commercial fertilizers.

After Culture.—The best method of cultivating Lucerne is to sow it in drills, at a distance of twelve inches apart. When the young plants are a few inches high they should be carefully weeded, and the intervals kept clean with the hoe. This process of cleaning should be kept up several times during the season. In the spring of the following year, wherever vacancies appear in the rows, they should be filled up by taking plants from places where they stand too thickly. The subsequent labor consists in keeping down weeds in the rows, and taking care that the soil is loose and clean in the intervals.

Time of Cutting.—The best time to cut Lucerne is when the flower is about to form. If the cultivation has been good and the soil is rich, four cuttings may be made each season.

Quantity of Seed to the Acre.—If drilled, fifteen pounds of seed will be found sufficient for an acre. Where sown broadcast it requires not less than twenty pounds.

Sowing Clover Seed.

It would have been better to have sown clover seed several weeks ago, but where this has been neglected or circumstances have rendered it impossible, it should now be seeded promptly at the rate of a peck to the acre.

Barley.

In the latitude of Maryland and running thence southward very little barley is grown, the greater portion of the barley now used for malting purposes being either grown in Pennsylvania and the more northern States, or is imported from Canada or Europe. The large demand for barley which has set in of late years, keeps up the price to a very profitable point, and it would be well if greater attention were paid to this crop.

As to Soil.—The best soil for barley is a deep dry rich loam. It is a cereal that is subject to no diseases, and will stand a long drought without much injury. If the soil needs assistance either of the following mixtures will be found sufficient for an acre:

No. 1. 10 two horse loads of marsh mud or wood earth, 5 two horse loads of stable manure, 10 bushels of wood ashes.

[Compost the above for two weeks—mix together, spread broadcast, and plough under.]

No. 2. 250 lbs. of Phosphatic guano, ploughed in.

No. 3. 10 bushels of wood ashes, 10 bushels of crushed bones, 2 bushels of refuse salt, 1 bushel of plaster—top dress and harrow in.

Quantity of Barley to the Acre.—Sow two bushels of barley to the acre. After harrowing, sow one peck of clover or, better still, one peck of clover and one bushel of orchard grass. Bush in and finish off with the roller.

Hide-Bound Meadows and Pastures.

Run a sharp, heavy harrow over such meadows and pastures as are hide-bound, previously dressing them with the following mixture:

10 bushels of wood ashes; 5 bushels of fine pulverized bones; 1 bushel of refuse salt, and 1 bushel of plaster.

Hauling Out Manure.

Manure intended for the corn ground should now be gotten ready, and hauled out as speedily as possible.

Potatoes.

Early potatoes should have been planted last month. It is not, however, too late to plant for a comparatively early supply, but the sooner the sets are in the ground the better. For the best method of cultivation see *Farmer* for March.

Root Culture.

The field culture of roots is very much neglected as a general rule with us. Yet an ample supply of roots where there are dairy cattle, and, indeed, where many cattle are kept, without regard to special purposes, is exceedingly desirable.

Sugar Beet and Mangold Wurtzel.

Soil.—The soil best adapted to the growth of these roots is a deep, rich loam, not too compact or tenacious, the sugar beet flourishing best in a lighter soil than the mangold wurtzel. The soil, however, should be slightly moist rather than dry, and if not naturally rich should be made so by manures or fertilizers.

Preparation of the Soil.—Plough deeply, and for a very heavy crop subsoil also. After thorough ploughing and harrowing, lay off the land in drills from 27 to 30 inches apart and one inch in depth.—Drop the seed thinly along the drills, cover with the back of a rake, and, finally, roll all smooth.

After Culture.—When the plants are about an inch high, dust them of damp mornings with a mixture composed of equal parts of wood ashes and plaster. When the plants are about four inches high they should be carefully thinned out so as to stand twelve inches apart in the rows. If there are vacant spaces they may be filled up with surplus plants, but these rarely do well. The plants should next be carefully weeded and hoed. Ten days afterwards run the cultivator in the intervals between

the rows, and be careful to keep the soil light and free of weeds throughout the growing season.

Quantity of Seed per Acre.—Three pounds of seed per acre is the proper quantity. Before sowing the seed should be steeped in lukewarm water for twenty-four hours to hasten germination, care being taken that the soil is not too dry at the time of planting.

Parsnips—Carrots.

Soil.—Deep fine sandy loam.

Preparation.—As for sugar beets.

Distance and depth of Drills.—Drills two feet apart and one inch deep.

After Culture.—The same as for beets.

Time of Seeding.—The earlier in April the better.

THE HESSIAN FLY.

The traditional origin of this enemy to the farmer is, that they were imported to this country during the Revolutionary War, in vessels from Hesse Cassel—hence the name “Hessian Fly.” I doubt the tradition. The Continental soldiers hated Hessian soldiers more than they did the British.—With the soldiers, everything that was mean and hateful, was dubbed “Hessian.” About that time, this mischievous fly appeared, had no name, and they christened it as above.

But never mind about his origin—he is here, and how shall he be killed? It can be done—not easily, but profitably. Plough him under—convert him into manure. He lives in the grass and weeds, and if you just scratch in your wheat, you only make up his bed for him, and you will make poor wheat if there is not a fly in a thousand miles of you. But if you will turn grass, weeds and flies under, you have converted bed and fly into valuable manure. If you wish to know when your ground is sufficiently prepared for sowing wheat, look whether you have killed all the “Hessians.” If you have turned them under, beyond the power of resurrection, sow, and it must be a bad season if you do not make a good crop.

A farmer resolves to sow wheat early, and another farmer (?) who has been in the habit of scratching in his wheat, sings out, “You are sowing too early—the Hessian fly will hurt it, or the frost may kill it.” Pay no attention to him; plough on, and plough deep, till you have killed the fly, the scratcher's scare-crow; and in regard to frost, tell him that wheat has not been materially damaged by Mr. Jack Frost, since 1849—almost twenty years—while Mr. Pestilential Rust has been damaging it every year. Tell him you will kill Mr. Fly—that you are not much afraid of Mr. Frost, and that you are fighting Mr. Rust; and if he is a man of sense, he will be silent, and follow your example.—*Cor. in Southern Cultivator.*

CURDSVILLE, BUCKINGHAM CO., VA., }
February 20, 1869. }

To the Editors of the Maryland Farmer :

* * * * Whilst I am writing I have concluded to comply with your request asked of your correspondents in November number, as I find none of them have answered it. “Why it is that a red galled spot produces a better crop than a blue grass sod soil manured in the same manner.” It is not because the sub-soil contains properties, as is supposed, that are not in the surface soil, but for the following reasons :

This bear spot has been exposed to the action of the weather probably for years. The freezing has bursted the grains of sand, heat and moisture dissolved them, by which means a superabundance of silica has been produced. Then the application of a sufficient quantity of vegetable substance combined with the silica forms just such nutriment as all crops require, and the soil being close and more compact, not puffed up with vegetable matter and deep turning, the roots become more strongly inserted into the clods beneath, which has absorbed the vegetable substance, are thus enabled to draw from it a more abundance of the required nutriment, which is not the case with the blue grass soil, it being so light and puffy the roots cannot get that hold upon the land necessary to draw from it a sufficiency of nutriment. For successful cropping and the improvement of the land you cannot, in my opinion, too frequently urge the importance of shallow turning and deep plowing. Keep the vegetation on top, break the subsoil with a subsoil or Colter plow, which leaves it in clods, beneath which will absorb the vegetable substance and into which the roots of the crop will become strongly inserted, and thus be enabled to draw more of the nutriment. Land thus prepared will sustain a crop much longer in a protracted drought, as the clods beneath will not give out the moisture so readily as it will when turned deep and made light with vegetable substance.

Very truly, your friend,

MATTHEW A. COX.

The rapidity with which phosphatic manure stimulates the growth of vegetation depends upon the readiness with which it may be dissolved in in water and taken up by the root. A very good method of making the phosphoric acid of ordinary bone dust soluble, is to spread it between layers of fresh and fermenting barn yard manure. The heap should be covered over with a thickness of several inches of dry earth, to absorb all the ammonia evolved from the barn yard manure, and the organic matter in the bones. The whole should be under cover to prevent the mass from being soaked by the rain.

NOTES AND COMMENTARIES.

BY PATUXENT PLANTER.

Your correspondent "Badger," in the February number of your interesting journal, in alluding to my article in January on Labor-Saving Machinery, makes some sensible suggestions as to the reason of the high price of such articles, and why they are not advertised more extensively. It is indeed strange that our farmers will prefer to buy of agents instead of the manufacturers direct. But so we see it in the case of fruit growers, who buy of tree peddlers instead of the reliable and responsible nurserymen, paying more and getting inferior fruit, or what often is the case, a different fruit from what they ordered. Now this mistake on the part of farmers is owing, I contend to two causes—first, the manufacturer or dealer in agricultural machinery does not advertise as extensively as he ought; and secondly the farmers do not subscribe to agricultural journals as they should do. Both stand greatly in their own light. Every man who claims to be a farmer should no more think of going without at least two agricultural papers than the lawyer without his reports of cases, or the doctor his medical journals. It is the more strange, because I have never met the man but who acknowledged that almost any number of any agricultural journal was worth to him more than a year's subscription to the same.

OIL CAKE.

At the foot of your "Price Current" is a note stating that oil cake was brought from the West and shipped from Baltimore to the extent of 15,570 tons during the past year, being against only 6 616 tons in 1867. This fact is as astounding and uncomplimentary to the sound judgment and good sense of our farmers and graziers, as was the fact some years ago, that England used all our bones, whilst our lands wanted bone dust as much as her turnip fields did. The experience of all English and American herdsmen and graziers is that it is the cheapest and most fat producing article of food that can be given to cattle and sheep preparing for the shambles, even when grain was at a low price.—Then surely when corn is 90 cents per bushel, it would well pay to sell corn and buy oil cake to be fed with roots. I never advocated the extensive growing of roots, for in our climate and on our soils I always believed corn was a more remunerative crop for any and all purposes, but with a full supply of oil cake to be used with roots, there can be no question that an acre in roots fed with oil cake would produce more beef and mutton at a cheaper rate or less expense to the farmer than would one acre in corn. I mean when corn is worth 80 or 90 cents per bushel, it is more economical to sell corn

and buy oil cake to be fed with roots. But when corn is worth only 30 or 40 cents, as was the fact some years ago, then it was the reverse, for an acre in corn including its fodder, would produce more meat at half the cost of cultivation, than would an acre in roots with the cost of the necessary quantity of oil-cake to be fed with the roots, for it is admitted that good beef cannot be made from roots alone; grain or oil cake must be given along with the roots. Our climate does not suit the turnip like the climate and soil of England, but we can raise the sugar beet to compete with England, or even France, and if we can obtain oil cake at a reasonable price, our beef and mutton can be put in the market at less cost to the feeder of cattle and sheep than when fattened on corn. This is a question of great interest at the present time. Owing to many causes the production of meats has lessened to an alarming extent in this country, and the consequence is, the prices are so high, that soon we shall be forced to become a land of vegetarians. It is not only astonishing but a positive shame to our people that in a country like ours, where the food, so conducive to the health and growth of the hog, is grown in abundance at trifling cost or ready furnished by nature in the grass of the fields and mast from the forest; while that animal is so hardy and so wonderfully prolific, bacon should be 15 to 20 cents a pound, when it can be raised at a profit for 8 to 10 cents. Farmers who keep no hogs, and there are thousands, surely never add up the cost of their bacon and pork, and add thereto the value of the milk, loose grain, offal, vegetables, &c., that is entirely lost by not keeping hogs. The Commissioner of Agriculture is calling attention to this meat question, and it behooves every farmer and lover of the prosperity of his country and its people, to give more attention to stock raising, and thereby correct this wrong management, it may be, avert a great calamity to the nation. The Honorable Horace Capron in his circular of February 5th, says "great public interest is manifested in the condition of farm stock. The increase in consumption and the actual falling off of our meat products, as in the pork supply, advances prices, and causes some apprehension of want among consumers." In connection with this subject I would state a proposition which every farmer can solve for himself. An acre of land well manured and highly cultivated, will produce 1,000 bushels or 60,000 pounds of man-gold wurtzel beet—such an acre similarly manured and cultivated would produce 75 bushels of corn at 80 cents, being \$60. Now, would \$60 worth of oil cake and the 1,000 bushels of beet produce more meat than if both acres had been put in corn, and 150 bushels of corn fed to the stock? I cannot speak of cattle, but I know that the 150 bushels of

corn would not fatten half as many sheep nor so well as would \$60 worth of oil cake and 500 bushels of turnips—the product of turnips per acre. And I presume the same will hold good as to the beet and oil cake with beef cattle. I wish such men as Mr. Johnson, of N. Y., and others who have had experience, would inform us at what prices oil cake could be used with profit, and what is the comparative cost of food, between Indian corn at 80 cents and oil cake with roots at its different market rates.

THE FARMER vs. THE MERCHANT.

It is gratifying to find so excellent and intelligent a writer as "D. L., of Howard county," sanctioning and sustaining my views on this subject. If the minds of the young men of the country could be brought to canvass this subject deliberately for themselves, we should soon have a large accession of vigor, active enterprize and intelligence to the ranks of the farmer, and agriculture would receive a corresponding impulse forward. There would be fewer losses of small fortunes, and fewer cases of bankruptcy of fortune, health and happiness, than now daily occur, all, all swallowed up in the whirlpool of commerce. Large estates would be divided, and each small division made to yield as much in nett profits as the whole estate. The great trouble is, young men with a few thousand dollars are willing to commence mercantile business in a small shabby way, or rent a cottage, and live plain as a starving professional man, yet are not content to begin farming, on a few acres, but must have hundreds of acres if they farm at all, though they start heavily in debt with the place under mortgage, without any practical experience. If they would only be content to start on only ten acres, free of debt, with a little capital to meet exigencies, they would, in a few years, be much more likely to increase their possessions than if they started with 200 acres in debt, or had embarked their little capital in trade in a small way, being forced to pay high rents and often to sustain their credit pay exorbitant interest to heartless money-changers and brokers devoid of conscience. Suppose a young man has \$5,000, and embarks in merchandizing, what would he have at the end of the year, if he had a wife, after paying store rent, house rent and expenses of self and family in a town or village? Nothing. If he had not broached on his capital it would be a great wonder. With \$5,000 he could buy ten acres of land worth \$100 per acre, put up a neat cottage and necessary buildings for so small a place, and have \$1,000 to invest in stock, implements and seeds, plant trees, &c. At the end of the year he would not only have supported himself and family in comparative luxury, but would certainly have cleared \$300, being six per cent. on his capital,

which capital would have been increased in marketable value a fifth or more. This is as clearly demonstrable as a problem in Euclid. Young gentlemen look to this matter before you rush headlong into "business" or embrace a learned profession!—reward for toil and anguish of mind comes so slowly, if ever at all. Remember, the "clod-hopper" can rise as easily to distinction as the "tape-measurer" or the "briefless barrister" or the "patientless M. D."

NAVY AND ARMY BEANS.

I was much pleased to read the communications on this subject in the February Number of your journal. There is no doubt that the demand is greater than the supply and it can be raised with little labor on thin land and pay a large profit. There is no land better adapted to its production than the alluvial soils in Southern Maryland. The bean and sweet potato can be made to take the place of tobacco, to a great extent, in this section of the State where labor is scarce. Women and children can be employed to advantage in the culture of these crops and no outlay for foreign fertilizers is required. Acre for acre either crop is as remunerative as tobacco or corn. The many large tobacco warehouses at present useless and unoccupied, would be very convenient and admirably adapted to the curing and preserving these crops as well as broom-corn, and manufacturing the brooms.

BUREAU OF LABOR AND AGRICULTURE.

From reading Major Giddings' lucid exposition of the prospects and operations of this department I have every confidence that it will become of incalculable benefit to the State, and ere long be recognized by the people, who already look favorably upon it, as one of the most valuable and important progressive movements ever made by the State. It is a cause of congratulation that its organization should have been entrusted to such able hands, the assistant to the department being Major Giddings, the father of the scheme, and chief cause of the creation of so useful a department of the State Government. It is to *immigration* almost alone we are to look for a rapid increase in the material wealth and strength, physical and political, of our State; and under a proper system, the shell-fish of the Chesapeake will pay the annual expenses of our State Government. A tax strictly collected of five cents per bushel on oysters, would raise a vast sum, and not be onerous to our people; the much greater part would come from the pockets of the lovers of bivalves in other States and from the "rest of mankind."

Permit me, Messrs. Editors, to congratulate you upon the variety and value of the various articles, both original and selected, which constitute your February Number. It was more than worth the year's subscription to the *Maryland Farmer*. It

is the interchange of views in plain talk that gives value to an agricultural journal, and in eliciting that talk you seem to have eminently of late succeeded. I am much pleased, and I am sure your many readers will also esteem it an important addition, that you have determined to give the drawings and description of the newest and most important machinery exhibited at the last Iowa State Fair. The great West is going ahead in agricultural labor-saving machines as in many and most other matters.

ANSWER TO "A PENNSYLVANIAN."

CLARKSVILLE, HOWARD Co., Md., Feb. 22, 1869.
To the Editors of the *Maryland Farmer*:

I see by February number of *Maryland Farmer* "A Pennsylvanian" desires information concerning a "better place" to live in. I have sent to his address a paper containing a list of places for sale in this section, and an article descriptive of its advantages which are superior to those of the Shenandoah Valley for agricultural purposes. I will state I have no land for sale, and am not interested in any land agency. I write from good will and practice what I preach. I will answer his questions as if they referred to this section. 2. Clay and sandy loams, deep and shallow; no more stones than necessary for building and draining. 3. Plenty of springs and running water; white and black oak, and Spanish chesnut, hickory, locust, gum, maple, cherry, pine and poplar. 4. From \$15 to \$50 per acre. 5. We raise grain, grass and cattle in abundance, and our soil is admirably adapted for all. 6. As Baltimore and Washington are our markets, papers in those cities will give all the prices. We carry all our produce to those cities being within reach of both. 7. Fifty cents a day and board, 75 cents and no board. Planting wages 75 cents and board, \$1 and no board; harvest \$1.50 to \$2 and board. Carpenters, masons, &c., \$2 to \$2.50 and board. 8. Men of small means, willing to work, would do well here. 9. Principally native and some Irish and Germans. 10. We have numerous and good markets for produce all around us, mills, stores, &c., but Baltimore and Washington are so near, (twenty miles,) we can market there, although our lands are from one to ten miles from railroad, but the people are projecting new railroads, &c., which will make us nearer market still. Before I close I will say a few words in reply to Mr. Werth's communication. As he remarks, the wooden collars are not new; I remember hearing of the use of wooden collars on the old homestead, which let all the harness off the horse, (except head-stall,) by simply unfastening a string and which never galled a horse. I also am reminded by the condition of my leather collars that I must replenish my stock,

and would buy wooden ones if I could get them. * * Mr. W. can suggest "only one improvement" to your excellent Magazine, viz: the publication of correspondents names, as he thinks it possesses but one fault. I will try to remove that one. 1st. The Editor has in his possession the real name of every contributor, (as a rule,) and can readily produce it should it become necessary. 2d. There are some who write for the good of the cause who would not like the mention of their names from a desire to shun publicity and enjoy retirement. 3d. The name and address of a writer, when published, expose him to a public correspondence which he may not have time to attend to, and a fact or statement made in an agricultural journal should rest upon its inherent strength alone, when the reader knows the Editor has a good name behind it, thus giving freedom to discussion without the danger of personality, and finally, readers may take the simple declaration of a well-known name without due investigation, and not give sufficient attention to facts supported by the signature of an obscure one.

Truly yours,

D. L.

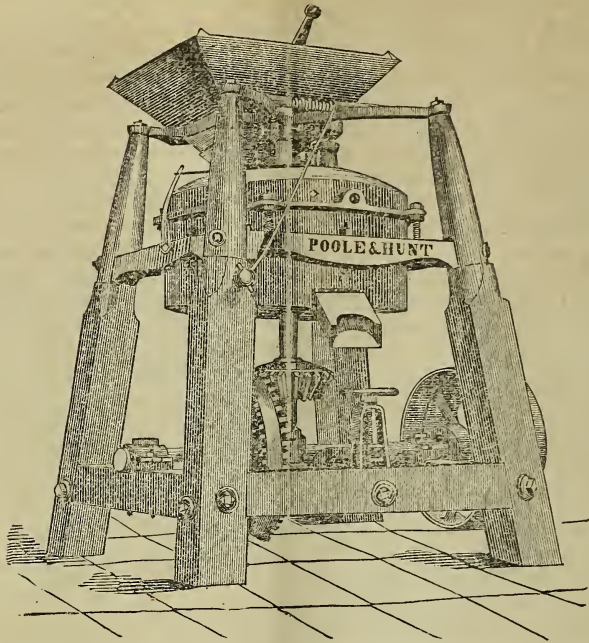
Unleached Ashes.

A learner asks how, when and how much unleached ashes may be applied to winter wheat while growing. They may be applied any time during winter or early spring, at the rate of from ten to thirty bushels per acre, evenly over the surface.—Fifteen bushels are a fair dressing. A broad-cast machine for sowing them is best. The winter season is a good time and snow will do no harm, unless the surface is so steep as to wash badly in a thaw. Good unleached ashes are worth fifty cents per bushel to apply to most grain crops.

LEACHED ASHES, are also well applied in winter on a *dry soil* in quantity from three to six loads per acre, evenly spread. Leached ashes have the greatest effect upon a sandy soil, as they absorb ammonia and assist such a soil in holding volatile manures, but they are good upon any soil needing phosphate, lime, soluble silica, &c. They are worth on many soils ten to twenty cents per bushel.—*Rural New Yorker*.

CULTIVATING ORCHARDS.—There is an excellent example of the benefit resulting from cultivating apple orchards, in the case of W. Lombard, of Augusta, Maine, who has some one hundred and seventy trees, mostly old, well cultivated, the soil stirred about as far as the limbs extend, and the ground mulched with refuse straw, potato tops, corn stalks, etc. One Tallman Sweet Tree yielded six barrels, which, at \$5 per barrel, brought \$30. The whole orchard, in one year, yielded \$613 in fruit sold; and the present, not a bearing year, \$200.

IMPROVED FLOURING AND GRIST MILL.



The above is a representation of an improved Flouring and Grist Mill.

The stones are encased in a husk, set in a substantial portable frame, covering a superficies of some four and a half to five feet square, and generally driven by a belt and pulley, or by gearing, if necessary. The grain, which is fed from a hopper and shoe common to ordinary Mills, passes, by means of a stationary tube, through the head of the spindle and falls upon the face of the bed stone, upon which it is distributed by the centrifugal force of the spindle. This is the patented principle, and subserves fully the end designed, that is, to prevent the grain, and other stuff ground, from hanging in the eye. It is only necessary to see one of these Mills under motion, to understand and appreciate the immense advantage gained by this improvement. The upper, which is the runner stone, is hung upon a gymbal or universal joint, balanced or driven by four journals, similar to the mariners compass. This gives the runner stone a perfect balance, without the possibility of binding on the driving points, a difficulty that attaches to all the best constructed spindles heretofore in use. It is this perfect balance that so much contributes to that evenness of grinding which characterizes these Mills. We learn that these Mills received the highest Prize Medal awarded to Mills at the Chrystal Palace, from a committee of mechanics, distinguished alike for high moral worth, and practical scientific research.

Mills have been sold, and are now running in most of the States and Territories of the Union, and in the Canadas.—So thoroughly have they been tested, that they are warranted by the manufacturers to do more work, and make better yields than any other description of Mills, with a saving of from twenty-five to thirty-three per cent. of power over large stones. This gain of power has been realized in so many instances, that it has become a fixed fact.

It would be economy in those having Steam Saw Mills, Iron Furnaces, Carding Machine Power, Sugar Mill Engines, Cotton Gin Gearing, and power used for any other purpose, not constantly employed, or with a small surplus to erect a mill of this kind, as with an additional outlay of comparatively a small sum, a Grist Mill can be secured and put in operation, of sufficient capacity to do all the grinding of an entire neighborhood, at the same time doing an amount of work, and making a yield fully equal, if not superior, to that done by large stones, with a saving of one-third of the power.

Sizes can be had, suitable for from two to twenty horse power, capable of grinding from five to thirty bushels per hour. These mills are manufactured by Messrs. Poole & Hunt, of Baltimore, who are well known throughout the country as builders of a large class of this description of machinery, and as practical mechanics

HOW TO GROW FOUR CROPS IN ONE SEASON—"High Farming" in the Garden.—Manure the land very heavily in the winter, so as to have it washed in by the rains and snows of that season. Then give it another coat in the spring. Plough the land deep; harrow well, and get the soil into fine and mellow condition. Sow over it radish or spinach seed.—Then furrow out ridges and plant large Early York cabbage. By the last of May the radish will be all out, so as to allow the cultivation of the cabbage. Then after that crop is out, plough and work the land again for celery. Plant this crop about the middle of July, putting the rows about four feet apart; then sow peas or beans between each row, which will mature in time for fall market, when they often bring the best price.—*Cor. Practical Farmer.*

FOR THE MARYLAND FARMER.

THE FARMER vs. THE PROFESSIONS.

TO THE YOUNG MEN OF THE COUNTRY.

The professions also receive their share of recruits from those who are dissatisfied with the "hard work" of the farm, and seek an easier livelihood under the broad shield of a professional vocation. It is natural that the country youth should institute comparison between the lawyer, the physician and the clergyman, as he looks upon them from the burden of some unsheltered task, and imagine their duties less onerous than his own. He sees the exterior of the edifice and thinks not of the weary days and nights, months and years spent in laying its foundation, nor of the constant exertion necessary to maintain its proportions. His ears are assounded by the verbal display of the learned counsel in a cross-roads law suit, and his mind is awed by the deference shown the village doctor and the peculiar relations of the shepherd to his flock. He grows up more and more dissatisfied, concludes upon a change and his will soon finds a way for the prosecution of his design. If he is ambitious, his ignorance of life and its varied duties and perplexing cares in every sphere, leads him to desire what he considers a more honorable occupation than that of the husbandman, and thus a two-fold motive impels him to a change. Should he select the calling of the lawyer, he must begin at the foot of the ladder by performing the duties of an office boy, by no means elevating in their character upon a miserable pittance inferior to the value of his services in the country. Later the hard work of this pathway begins in earnest: Eight or ten hours of the day must be spent in transcribing the documents whose preparation falls within the power of the attorney in attending to the correspondence and books of the office, and in assisting his superior in the close and confining duties of an amanuensis, shut out from the bright sun and the smiling sky, the green grass, the song of the birds and the scented flowers. All this is the routine work of the brain, and no one who has tried both will declare this *easier* than the average physical exertions of daily farm labor surrounded by nature and her wondrous charms. To this period succeeds the life of the student, with its close applications, hard and unrelenting study and the strain upon the mental energies necessary to make the discrimination between the perplexing subtleties of the law. Then, after a preparation of three to five years in the theory, comes the practice of the law and its conflicting operations. The office of the law, in the social compact, is to secure justice, but its complex character is made use of to defeat the object of its creation, and this disparity between justice and law is a serious thorn in the

conscience and feelings of the young practitioner, until circumstances shall have so warp both that justice signifies only the cause of his client, and the law, the means of securing his success. Here, also, the inexperience of the novice presents a formidable barrier to his success, and this operates in various ways, still keeping him in a subordinate position as scribe or copyist to some older practitioner. By the time the arduous efforts of long years begins to turn the tide in his favor, he could have secured a competency as a farmer. In regard to the ease of this profession, one of Maryland's greatest lawyers recently said in an address to workingmen, "many and many hours of the night when you were resting from your active toil and reposing in innocence in your beds, I have been obliged to set up until the oil in the lamp ceased to illuminate the chamber;" and this is a *representative* voice, one of ten thousand that could be mentioned to the same effect.—Does this look like an easy calling? Suppose, at last, that fortune smiles upon the lawyer, will there be no burdened conscience to obscure its brightness? will his self-respect and honor remain untarnished amid the wrangling for years over other people's quarrels? Again, the ranks of the legal profession are full, there are more laborers than work, and this also presents several disadvantages. It makes it more difficult for a beginner to succeed and is apt to drive him from his profession to launch his frail vessel upon the tempestuous waters of a political life, to become a prey to its worst and wildest passions. If he remains, he is more likely to accept any case, right or wrong, than to discriminate between the right and the wrong, and this leads us to the consideration of the honorable character of his calling. We implied above that justice and law were not interchangeable terms. A case may be just and have no law to sustain it; and the law declare innocent, where the reason and conscience of the absolved party, brand "guilty" upon his inmost soul. Is it honorable to work night and day in efforts to save from the punishment of the law a person tried and found guilty at the tribunal of his own conscience? Is it honorable to wield the authority of the law against a case, which has nothing but its justice to recommend it? Is it honorable to aspire to be great in the profession, whose time must often be spent in laborious efforts to prove before twelve sensible men that wrong is right, that truth is a lie, and that justice is a criminal to be scorned of all men? Is it honorable to do all this from the motive which actuates the counselor, the hope of gain, weighing sordid gold stained with crime, in the balance with the spotless jewels of the robe of justice? Yes, the law gives her votaries, all honorable men, the privilege of forgetting in their "surplus age" that they are

men that should act upon those principles held sacredly binding by the rest of civilized mankind. Oh! the perversion of the human intellect in the thing called law, if all this is honorable, the life of the farmer towers to the height of all excellence and perfection, and is, to the occupations of other men, what the sun-lit pinnacle of the temple is to its base, wrapped in the mist and mire of the valley.

Concerning the physician, our remarks will necessarily be more concise, as for the ease of this pursuit, we cannot conceive that any one should enter it to secure his personal comfort. A glance at its requirements will convince every one that it is no life for the indolent. If there are duties more exacting and perplexing, and burdens more serious than usually fall to the lot of man, they lie, unquestionably at the door of the physician. Long years are to be spent in studious application, patient investigation and a concentration of mental effort, required by no other calling, for upon him rests a responsibility experienced by no other, and upon him hangs the fearful issues of life and death, encountered alone by him. As in the legal profession his inexperience and the number that stand waiting for the call of distress are obstacles to his immediate success. He must obey every call for help at any hour and in any season, very often knowing it will be unremunerative, save in the reflection, through the sleet and hail, it is in the cause of suffering humanity. In this profession, also, there is a vast discrepancy between its theory and its practice.—The medicine that cures the disease very often ruins the constitution; the remedy for one disorder very often creates others more dangerous; the application that is beneficial to one is inoperative or injurious in another; armed with the medical love of the ages that have past, the physician enters the chamber where disease has prostrated the young and lovely, and notwithstanding his efforts and the anguish of grief-stricken friends, death seizes his patient and carries it away, victor over his deepest skill. One of the most eminent men of a Northern State (a physician), declared the world would be better off if all its drugs were cast into the sea, and we might quote the same effect from a long list of medical talent in high places. It is always necessary to unlearn much of the theory of early years in the practice of later ones. Are there not serious thorns enough? Is there nothing discouraging in this path to inspire with profound caution any feet that would venture upon it? These things show that this calling also has its hours of tempest with the imminent danger of complete disaster.

We turn now to the life of the clergyman. In the ranks of this class, we know there are some whose reason and volition have been superseded by the potent influence of a mysterious call. Upon

those under this influence, our reflections will have effect, but this calling, like all others, is weighed in a balance as a means of earning bread; and in this light we shall offer a few remarks. A great objection may be urged against it in the protracted and confining character of its preparatory duties, but an objection to which the others are not open, stands glaringly prominent in these duties—a great part of the time must be spent over metaphysical subtleties and the speculations of visionaries, which hold no relation to the religion of the heart and are in no wise connected with the practical duties of this vocation: His early fields of labor must be those in which the seed, if cast at all, must be cast in stony places. He is expected to keep an open house free for all, live better and dress better than others, upon a salary, which if paid, a good clerk would refuse for his services, and the perversity of human nature, so unpleasant in its manifestations at any time, is peculiarly unpleasant to the minister, as he is expected to combat it instead of letting it pass on its devious way, and this perversity is most repugnant to the minister in the manner in which he receives the remuneration for his services. In vain he tells his people that he and his family must eat and drink and be clothed, that the laborer is worthy of his hire, that it is a fair exchange of his services for the price agreed. Slowly and reluctantly his salary comes in a little at a time, which keeps him constantly begging and borrowing, because he has no way to compel the payment of what is justly his due. His family and himself are considered proper recipients for all manner of charitable offices, and finally driven from his independence, by his necessity, he consents to the employment of questionable means to procure his salary. A paper and pencil committee solicit of strangers, the amounts which the flock refuses to contribute. Parties are got up to attract the young and inexperienced, and initiate them in the vices of later years by miniature gambling in grab-bags and ring-cakes; and the writer recalls an episode of personal experience in which a donation party, to raise the ministers salary was held, at night at a country tavern, with the reception room of the devout on one side and the bar-room in active operation on the other, a few feet distant, through an open passage, whose inmates would swagger from room to room to sow the seed of their immorality in the fertile soil of susceptible minds. The revelry of an ante-chamber of destruction has joined hands under one roof with the ministry of reconciliation, to raise the minister's salary. Is this more honorable than driving the product of healthy toil to market and receiving the golden returns for the labor? The peculiar burdens of the minister, his night labor and exposure under unfavorable circumstances, soon allow him

little choice in the nature of his labor, and the airy dreams of young ambition end in the heavy footfall of the colporteur of back alleys, under the triple burden of dyspepsia, tracts and bronchitis.

In conclusion, the time spent in the preparatory labor of the professions, would enable a young farmer of good abilities to get such a start in the head-work as well as the hand-work of his calling, that by the time they get ready to work, he is on the high road to success, skillful and experienced in the sciences that belong to his locality. Should he wish to pass beyond the practical knowledge of the things around him, and go as far as Humboldt, or as deep as Cuvier into the origin of mysterious laws, a wide field lies before him. He cannot only embellish his mind by his researches into the sciences that belong to his calling, but bind them as moving powers to the wheels of his industry.—Combining the laboratory of the theorist with the work-field of the farmer, he can give to the world problems whose solution will hand him down to the ages that are to come as a benefactor whose developments have been for the good of all ages.—The nature and habits of the flowers of the field and the crops of the farm may become as familiar to him as an oft seen face, using that knowledge to direct his action in their successful manipulation. He may extend his acquisitions as widely as Spencer, and make all arts and sciences tributary to the grand stream of his practical tillage, upon whose placid bosom he may glide serenely to a rich reward. His social influence may be equally beneficial. There are thickets of ignorance to be cleared up by patient labor and earnest example, schools to sustain and new ones to build up; libraries and associations to organize, to sow the seed of the new crop which shall spring up in Laweses, Rosses, Newton and Sinclairs, thus gathering around him as the solace of his declining years, the homage of his race and the esteem of the community, and in the end

"Wrapping the drapery of his couch about him
To lie down to pleasant dreams."

D. L.

BONE DUST may be applied directly in the hill, to corn or potatoes, or composted with loam before it is used, as you please. If mixed with about twice its bulk of loam, perhaps it would be the best way to apply it. About a tablespoonful of pure bone is enough to hill.

LIME by being exposed to the air a month or two will generally become slaked quite fine, and may then be applied to land, either upon the surface or harrowed in on plowed soil, which is the best way. Lime slaked by water is not injured at all.

FOR THE MARYLAND FARMER.

PLANTING AND CULTIVATING SWEET POTATOES.

Sweet Potatoes are most readily grown on deep, sandy soil; but all farmers' lands are not sandy, and with those whose soil is a heavy loam they may be grown of good quality, by a proper method of planting and cultivating. But sandy soil is the best for the production of sweet potatoes of the best quality.

About the second week of May, in this latitude, prepare the ground to have plants set out in hills. Soil that is sandy should be ploughed seven inches deep; but soil that is heavy loam, five inches deep; as potatoes grow short and chunky by shallow ploughing. After the ground is ploughed, harrow it over thoroughly; but on soil that is a heavy loam, use the cultivator after harrowing, getting it in as mellow condition as possible.

The ground may be marked out, on sandy soil, five inches deep, with a plow drawing furrows *each way for hills*, three and-a-half feet apart; this will give *space* between rows to farm the hills *each way*, with a plow or cultivator; but on soil that is heavy, furrows should be drawn *four feet apart each way*, as vines run and spread thick over such ground. On such soils should be farther apart. Apply to the *hill half shovelful* of horse stable manure, that has been well rotted, and has laid at least *six months* in a compost. Hoe up the earth on top of manure placed in hill fourteen inches high. Once hoeing around will form a hill sufficiently large.

After hills are made they are ready for plants. Let one sprout in a hill, which is performed by running the right hand down in the middle of the hill into the manure, and with the other hand put in the sprout as the right hand is drawn out, being careful to have *all fibres of roots* set in the manure and earth, which should be pressed around plants. Water thoroughly, and immediately cover the surface of hills slightly with dry earth, to prevent the ground from becoming sodden, especially on soil that is a heavy loam.

In the course of two weeks after plants are set out, they require cultivation. In the first place, the soil around plants should be loosened. This should be done with the *thumb and fore-finger*; but on soil that is a heavy loam, (if the ground has become sodden,) a trowel may be used—being careful not to disturb any roots, or fibres of roots.

They may be ploughed once on soil that is a heavy loam—oftener, (if of choice,) on sandy soil. This should be done before the vines commence to run and spread over the ground. After being ploughed, hoe immediately, loosening the ground around the plants.

After vines have run and spread, so as to be in the way of working, they may be *turned*, so as to leave rows *open* to the plow or cultivator, (cultivator preferable,) as it does not leave the ground *ridged up*, and the hills have a better access to the rays of the sun. This is important, especially on soil that is heavy.

Turn the vines between rows, right and left; this should be done with the hands, laying vines on every two rows, which will give open way to the plow or cultivator. When rows are ploughed or cultivated on one side, hoe up the earth around hills of plants—then turn back the vines, and the adjoining rows will be open to proceed in the same manner. After which, spread the vines over the ground.

During the growing season, on sandy soil, they should be farmed once in every two weeks, but *oftener* on soil that is a heavy loam—and be particular to keep the earth up around hills of plants to insure moisture to the hill.

They will require cultivation up to the first of September, and the vines should be kept *loose* from growing fast to the ground, until within two or three weeks of the time to dig them. The proper time to dig them for packing, is the first week of October, and should be dug, if possible, before frost has killed the vines; but should frost come sooner to blacken the vines, they should be dug immediately; for if the season is stormy, and ground keeps wet and cold, the potatoes will take injury. Sweet potatoes, when dug, should lay in the sun, if possible, to dry. But should the weather not permit, spread them out thinly on the floor in a warm, dry room, *where there is fire to dry them*; and be particular not to handle them roughly, bruise or skin them, or they will rot immediately.

They may be packed soon as dug, if by laying in the sun they are perfectly dry, (and this is a much better way;) but if not dry, (on the day they are dug,) let them dry in a warm dry room, as I have stated, before they are packed. If any quantity of them lay together, they will *heat* within two or three days. They should be packed before heating and *must* be dry when packed for keeping.

SPROUTING SWEET POTATOES.

In the first place, arrangements should be made early in the winter to have frames and covers made, and seed potatoes and all necessary materials for the hot-beds engaged in due time. The potatoes, when received, should be kept in a warm, dry room, until they are placed in the hot-bed, which must be warm, as they will not bear a lower temperature than forty degrees, without injury.

The location of the beds should be on dry ground with a Southern inclination, and convenient to pond or branch water. The best material for hot-bed is fresh horse-stable manure, that has not been

rotted; and if mixed with one-fourth its bulk of either fresh leaves or straw, the heat would be more mild and durable and less liable to scald the potatoes.

About the first or second week of April, in this latitude, haul the materials for the bed, and mix them together in a ridge where the bed is to be made, and as soon as it is hot, shake it thoroughly, mixing the cold and hot, wet and dry portions together, forming a bed on the top of the ground, running east and west, which, when settled with fork, (not tramped,) should be fourteen inches high, more or less, as there is a greater or less proportion of manure used, and six inches wider on all sides than the frame to be placed over it. Hot-bed frames should be made of two inch oak plank, framed together at the ends with keys to be taken apart, and placed in the dry when not in use. They may be twenty feet or less in length, and for convenience should not exceed four feet in width. The front or South side should be eight inches high; the North, from eight to twenty, according to slope of the ground on which the bed stands, as the top of the frame should have a pitch of eight to twelve inches to receive the heat of the sun, and to shed off the rain freely.

Cover the beds four inches with mellow earth, on which set the frames, and proceed to lay the potatoes *two inches apart*, with the top end of the potatoes towards the North or upper side of the bed, and opposite the middle of the adjoining potato, placing the large ones at one end of the bed and the smaller ones at the other. Cover the potatoes with three inches of good soil that is free from foul seeds and will not bake—top soil from the woods and around old bogs would be preferable.

During the first ten days the beds should be carefully examined by running the hand down in the manure, and if it becomes so warm as to feel unpleasant to the hand, there is danger of scalding the potatoes, and should be cooled by making holes through the bed and pouring water down the holes, being careful not to apply too much at a time.

Pulling the plants before all are of proper size is the cause of thousands being destroyed, and to avoid this, the bedding may be continued a week or ten days, that the plants may be pulled in succession.

The beds must be carefully covered at nights, and in cold and wet weather, and be particular to uncover them every fair, warm day, to toughen the plants and enure them to the open air.

Glass-covered hot-beds cause the plants to spring up tender and weak, and such plants do not grow when set out in hills like those raised in open beds.

The best covers are made of *strong oiled mustin*, tacked on lath, so that they can be rolled up conveniently. These covers will admit the light, shed

off the rain, and be cheaper in the end than other covering, and sufficiently warm, except in extreme cold weather, when straw or some warm covering should be thrown over them.

The beds should be watered in the evening with a suitable watering-pot, to keep the earth in a good growing condition. If spring or well water is used it should stand in the sun or be warmed before using.

After the plants are up, they should, if the weather is warm, be kept tolerably moist, to encourage the growth of good, strong roots, and light warm showers would be better than watering, but cold and heavy rains must be guarded against, as they would soak into the beds and ruin them. Ditches should be formed around the beds and the earth thrown up to keep the water from running under and chilling them.

When the plants are three inches high and well rooted, they are ready to pull, which is performed by taking hold of the sprout with the thumb and fore-finger of one hand, while the potato is held firmly in its place with the other.

Careless drawing by inexperienced persons frequently destroys half the profit of their beds.

When plants are to be sent a distance, they should be set in shallow boxes with their roots in wet earth or moss, but they must not be packed in wet weather, nor have their leaves wet, or they will rot immediately. Plants may be taken off the bed and preserved in a cave or cellar for a week or more, with their roots packed in damp moss or earth, if not packed too close.

It is a common error to lay the potatoes too close; they should lay two inches apart, as I have stated. A bed four feet by twenty feet will hold two bushels of medium size potatoes. If potatoes are small, more—and if large, less room is required.

VARIETIES OF SWEET POTATOES.

There are grown in this latitude six varieties of sweet potatoes, which I wish to say a few words about, and the adaptation of different soil to the different varieties.

1st Variety.—Bermuda—color red. This is an excellent potato, providing it is grown on deep, sandy soil, which must be of the most barren kind. But are not good when grown on light loamy soil—or soil that is a heavy loam—as they are watery and will not cook to be good.

2d.—Popular Sprouts—color, a white yellow. This variety is not a good kind unless grown on deep, sandy soil of a barren kind.

3d.—Early York—color, light yellow. When grown on deep sandy soil are good, otherwise not.

4th.—Nancy Mun—color, deep yellow. An excellent potato, and the best I have mentioned; to be grown on deep sandy soil, or soil of a light loam,

5th.—Old fashion red. A very sweet tasted potato; should be grown on deep sandy soil to be good.

6th.—Old fashion yellow. The best of all mentioned, to grow on any kind of soil; but they do not turn out as many large potatoes to the hill as the new varieties when grown on deep sandy soil, but are the best to taste. These, (old fashion,) may be grown on soil that is a heavy loam of good quality, but are better tasted when grown on soil of light loam, or sandy soil.

I have thought it proper to state the number of varieties of sweet potatoes that are grown in this latitude, all of which I have mentioned, may be seen in the New York and Philadelphia markets, and I have had it whispered in my ears "sweet potatoes are not good now days; they cook so watery I cannot bear them any more."

Now, why should this fault be found? I for one can account for it; it is because those new varieties I have spoken about are not grown on ground adapted to them, hence the complaint of sweet potatoes not being good now days.

It will, (and I am aware of it too,) take a lawyer to tell the different varieties in market, especially the yellow variety, and thus it is, the Nancy Mun yellow, and the old fashion yellow, (two of the best varieties grown in this latitude,) must receive fault finding.

A. C. C., A JERSEYMAN.

Burlington Co., N. J.

KEEPING SWEET POTATOES.

A correspondent in Fayette county, Tennessee, in the January Monthly Report of the Agricultural Department, gives the following mode of keeping sweet potatoes:

The sweet potato is one of the crops upon sandy loamy soils that yield incredibly where attention is paid them, and return a fine profit, selling usually at the beginning of the year at from \$1 to \$1.50 per bushel, and from \$2 to \$5 at bedding season. Great difficulty is encountered in keeping them, as they must be kept at uniform temperature, and are very sensitive to frost. The most successful mode for keeping them is the old pioneer "dirt bank" or hill, covered with common boards to protect from weather and rain, after this manner: Elevate the bed upon which the potatoes are to be placed about six inches above the surrounding level; upon this put about two inches of dry hay, then place three boards upright so as to form a triangular tube, and around this pour the roots selected, excluding all that have been injured in digging or prematurely rotted. After this requisite quantity is placed on the hill, cover over with dry straw about two inches and cover with dirt about six inches leaving the triangular tube open for the heated air from the usual sweating process to escape; and when this sweating has ceased, and when the weather becomes cool or cold, stop up the tube with hay to regulate the temperature, keeping them cool and dry; and when cold freezing weather begins put on an additional layer of earth, at least 12

inches, and more hay on the tube. Having placed a cover over the hill, inclined to the north as low down as the hill will permit, open the hill only on pleasant days on the south side, and replace as soon as practicable the straw or hay and earth.

VOICE FROM WISCONSIN.

MILWAUKEE, WIS., March 8th, 1869.

To the Editors of the *Maryland Farmer*:

The March number of your magazine has come to hand, replete with interesting matter. "*A voice from South Carolina*," with your permission I would like to make a few comments upon, hoping to throw a little light as to the view any honest unprejudiced man, who has been educated in the Free States (formerly) would take of it, and possibly enable X and other Southern farmers, to remedy the evils he mentions, in a measure. That the grasses misrepresentations are many times made concerning the condition of the South no one doubts—but I judge from the tone of our friend's article, he is not exactly taking a philosophic view of the matter, and that even the "carpet-baggers" and "government spies in the shape of picture venders, and sewing machine humbugs" can be made useful and profitable to the Southern people, if they only realize fully the position, viz: The old order of things is passed away forever, and cannot be recalled, and they must adapt themselves to circumstances and conditions of things with a determination to better them as rapidly as possible, until the whole country shall be again restored to its ancient prosperity.

What our people want North, South, East and West, is an interchange of ideas, and a better knowledge of each other, and our country at large. Do you suppose if the mass of the people North and South had understood the character, habits, customs and wants of each section of country, that they would have been scourged with the horrors of the late war? *Never!* For this reason, if for no other, I want to see your Southern magazines, papers and periodicals generally taken throughout the Northern and Western States, and our literature circulated among your people. And now let me suggest to my South Carolina friend, we in Wisconsin, are "pestered" with "book peddlers," "picture venders," "corn doctors," and quacks of every conceivable shape and kind. But if we don't want what they sell, we *don't buy*, and any misrepresentation from such a class will never effect any community. But we do learn many useful things from them. One illustration will suffice, one of these "humbug sewing machine" chaps, came to my house four years ago to sell a machine to my wife, she said she did not think it would pay to buy one. But the agent left it at the house, saying he would come and get it. After an absence of three

weeks he "turns up," in the mean time my wife learned to use the machine, and to day *I would not sell it for \$500* if I could not replace it. That's the way I was humbugged, I liked it, rather. But to come to the question of labor. If the negro won't work for reasonable wages (which I do not believe is the case) get along without him until he will; raise your own corn, pork, beef, wheat, &c. you can do it as well as thousands of people are now doing in Minnesota, Iowa, Missouri, Kansas, Nebraska, &c. Just you get in these carpet baggers, book agents, &c., and have them see there is a show for a white man there, and my opinion is you'll find a wholesome change. I hope the day is not far distant when the Southern States may be reconstructed upon proper principle, and I believe she has a glorious future yet before her. When the common school shall become as general as in old New England, and Southern ideas have become harmonized with free institutions and free labor; then, and not till then, will capital and population flow into your country, developing its resources, and restoring you to the good old days of yore. I know personally, many wealthy men who have gone South with a view of settling, but they were regarded with suspicion and returned. One of my friends did invest \$30,000, but to use his expression, "I couldn't stand the pressure," and sunk \$8000 of his money and left. On the other hand very many of them write home most flattering letters as to the country, its resources and people. But I have already taken up too much of your space and time, and perhaps have given no new ideas. BADGER.

A CROP OF POTATOES.—A correspondent in the *Maine Farmer* gives the following account of his potato crop: "I planted May 28th, two barrels of 'Early Goodrich' potatoes, which have given me in return 270 bushels of marketable, and twenty bushels small potatoes; in all, 290 bushels. They were dug the 20th of September. They were on 125 rods of land, in rows three and a half feet both ways; dropped on top of the ground, with a piece of unslaked lime in each hill as large as a hen's egg; or of air-slaked lime one teacup full. I think much credit for this large crop is due to the manner of planting, for last year and this, I grew 250 bushels of 'Oronos' to the acre, and had not rot. For healthy growth and full development, potatoes need plenty of air and sunshine, which they do not get when deep in the ground, and near together."

PRODUCT OF WHEAT.—I do not believe, says the editor of the *Experimental Farm Journal*, that eighty bushels of wheat were raised on a single acre of ground in California or in any other place. Sixty bushels of California white wheat have been raised on a measured acre, but it stood very thick and the spikes were four to five inches long, and every spike-let fruited. Every spike contained from forty to eighty grains. I know of no better yield than this.

SKIFF'S CORN-PLOW AND SEEDER COMBINED.



"The above cut represents Skiff's Corn-Plow and Seeder Combined. It is said by the committee to be durable, and simple in construction. The seeder can be adjusted in five minutes. It will sow all kinds of small grain, on all kinds of ground. This machine is the result of many years' patient experimenting; and a fair trial is asked for it." Patented and made by Cornelius Skiff, of Grinnell, Iowa.

The Apiary.

YOUNG QUEEN ISSUING WITH FIRST SWARM

D. M. Worthington, of Elkridge, Md. communicates the following to the *American Bee Journal*:—

"As I clip the wings of all my young queens, I was much surprised, on returning home one evening this spring, to find that a hybrid stock had cast a strong swarm, which had clustered and had been bived without any trouble, evidently having a queen that could fly perfectly.

The swarm had been put in a swarming box, and on shaking them out into a hive, I found a black virgin queen, very small and active. I then opened the parent hive, and found a queen cell with the cap cut entirely off, showing that the queen had left it some hours before; and on the same comb I saw the old Italian queen, with her wings clipped.

I have never before heard of an instance of a first swarm leaving with a young queen; and suppose the old queen must have attempted to go, and finding, after the bees were on the wing, that she was unable to fly, returned to the hive; the young queen having in the meantime hatched out, left with the swarm."

TO STRAIN HONEY.—Bees make no honey late in the season, therefore take it away early. Select, and mash by hand, and strain through a sieve. In warm weather it will nearly all drain through in a few days, and the honey thus passed will be pure and perfect, and will candy in cold weather. If it is desirable to prevent candying, keep it warm.—

What remains in the combs may be washed out with a small quantity of water, and may be boiled and skimmed, and answers the same purpose in culinary matters as the best. The silly practice of heating and straining through cloth always spoils the honey.

TO DRIVE BEES OUT OF A COMMON HIVE WITHOUT BREAKING UP THE OLD STOCK.—This operation is performed precisely the same as if you intend to transfer them, comb and all, to the hive, excepting only that the combs are not removed. The old hive is permitted to remain for fifteen or twenty minutes on the original stand, thus catching up the bees that may be out at the time the operation is performed, the best hour for which is between 10 and 12 o'clock M. The new colony must now be placed in the old situation. The bees which have been out to work, and which are caught up in their old hive, will stick to it when it is put in a new place.—Some persons may prefer to leave bees enough in the old hive to take care of the brood, &c., and carry it a mile or more, from where it stood before, so that all these bees may stay in it.

REMOVING OLD PUTTY.—Those who have plant houses, frames, &c., know how difficult it is to remove old putty from sashes without injuring the sash. I have seen it stated in some journal, that it could be removed very easy by applying a hot iron to it. I tried the experiment a few days ago for the first time, and was quite surprised to find how easily the most indurate old putty could be cut out after being well warmed up by the application of a red hot iron. Try it.—*VITUS, in Gardeners Monthly.*

THE MARYLAND FARMER

AT \$1.50 PER ANNUM,

PUBLISHED ON THE 1ST OF EACH MONTH,

BY

S. SANDS MILLS & CO.

No. 24 South Calvert Street.

CORNER OF MERCER,

BALTIMORE.

S. SANDS MILLS, } PUBLISHERS AND PROPRIETORS.
E. WHITMAN, }

BALTIMORE, APRIL 1, 1869.

TERMS OF SUBSCRIPTION:

\$1.50 per annum, in advance—6 copies for \$7.50—10 copies
\$12.00.

TERMS OF ADVERTISING.

1 Square of 10 lines or less, each insertion.....	\$1 50
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1 " 6 "	75 00
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Appropriation to the Maryland State Agricultural Society.

The City Council of Baltimore, recently appropriated \$25,000 in aid of our State Society, which, in addition to the \$25,000 already appropriated by the Legislature, making \$50,000, will enable them at once to fit up the beautiful grounds at Pimlico for the exhibition in October next. The officers of the society are determined to prosecute the work to a speedy completion. It is contemplated to make it one of the most attractive Fair Grounds in the country.

PROFITABLE COWS.—We understand, says the *Harford Aegis*, that an Alderney cow belonging to Ramsey McHenry, Esq., produced sixteen pounds of butter in one week during last month without having been very highly fed. Quite recently ten pounds in one week was made from an Ayrshire cow belonging to the same gentleman, which latter, we understand, he considers an ordinary yield.

EXCELSIOR OATS.—We acknowledge the receipt from Hon. Horace Capron, Commissioner of Agriculture, of a package of the Excelsior Oats, a recent importation from England, which will be tested on the "Home Place."

COMPOST.

A correspondent, writing from Virginia, puts the following question:

To the Editors of the Maryland Farmer:

Will some one of your correspondents inform me, through your Magazine, how to make a compost of all, or any of the following materials, the first of which I have in great abundance, convenient—the others, to haul three miles:

First—Forest leaves and woods mould; 2d—Night soil; 3d—Weak ley and refuse matter from a soap factory; 4th—Gas lime; 5th—Plaster or gypsum.

REMARKS.

Our correspondent has in the above articles all the materials for an excellent fertilizer. In respect to gas lime, it should be used, if at all, very sparingly. At the best its chief merit lies in the fact that after exposure for a considerable period of time to the atmosphere, it is first converted into a sulphuret of lime, and finally becomes a sulphate of lime. As plaster or gypsum is of itself a sulphate of lime, in its most useful form, there is no reason for adding to the compost heap gas lime also.

In making the compost, form the bottom of the heap of such dimensions as may be necessary to convert the amount of forest leaves and woods mould that can be gotten together. The bottom layer of these materials should not be less than three feet thick. Mix the night soil, soap ley and plaster together; the latter to retain the ammonia in the night soil. Put this into a pit by itself, well puddled, so as to retain water. Now, dilute the mass with water and after stirring it well pour it with a scoop over the heap of leaves and woods mould, until it is well saturated, making channels from the heap to the pit to carry back the surplus liquid so that none shall be wasted. The next day cover the top of the compost heap with a thin layer of earth to check evaporation. The next day put on two feet more of woods mould, &c., and saturate and cover as before. The day following add eighteen inches more of woods mould, &c., and again saturate and cover, and in this manner proceed until the materials or the liquid is exhausted. In a few days of warm weather the whole mass will begin to ferment, and as soon as the fermentation has been thorough, break down the heap, mix it well, and cart it out. Such a compost properly made will be a powerful fertilizer.

SOME farmers are so stupid as to laugh at their neighbors who practice carding their cows. Yet the good results of this practice are seen, not only in the better appearance of the animals that are carded daily, but in fuller milk pails.

IRRIGATION.

To the Editors of the Maryland Farmer :

In your valuable Magazine of January I was attracted by two articles, headed "Irrigated Meadows," and "Agricultural Engineering." It is very gratifying to see one of the most interesting and important branches of agriculture agitated which has almost entirely been neglected in this country. The difficulty in introducing irrigation is the want of experienced engineers in this particular art, and I fully agree with Mr. Wilkinson's suggestion, that some enterprising young engineers should make agricultural engineering a speciality. In addition, I would say, that any intelligent farmer whose circumstances and taste would allow to acquaint himself with the use of a leveling instrument, and a little surveying, would find a field of very interesting and useful occupation in the study and practice of irrigation. Volumes have been written on that subject, in Europe, by prominent men, some of whom devoted their whole life time to the further development of this branch of agriculture. Governments have encouraged and promoted this subject to its full merit, in many provinces where irrigation is now flourishing, and general wealth has resulted from it. In Lombardy the farmer cuts his irrigated meadows from five to seven times in the year, in Germany two and three times, never less than twice. I have seen raised five tons of hay per acre, in Germany, on meadows irrigated by the common running water of a brook, without any other manure; but the surface of the meadows were shaped to the greatest perfection into inclined plains covered with a system of irrigating and draining ditches.

Though the highest results of irrigation can only be effected by such artificial shaping of the ground, I would not advocate its application to this country, on account of its great expense, but would recommend modifications in the treatment of meadow grounds for irrigation. If results like that reported of Mr. Allen's meadows, in the State of New York, i. e. three tons per acre, have been experienced, I should think any farmer would be satisfied to realize such a profit with a comparatively small outlay. There are many opportunities for irrigation; runs, brooks, mill-races, which could readily be turned on meadows, the water sent in different directions, for distribution, and carried off again by suitable drains and ditches. But how to do this in different localities, what rules are to be observed in the location and construction of dams, ditches, embankments, sluices, &c., and *how to use the water*, are questions on which depend success or failure.

I intend some future day to write a treatise on this most important subject, and give my experience for the benefit of others after having made some more experiments in regard to the climate of this country,

on my own farm, as my experience as an agricultural engineer was made in Europe.

In the meantime I am ready to give my advice to any farmer wanting information on the subject, most cheerfully, through the columns of your periodical or by private correspondence.

AUG. FAUL,
Druid Hill Park.

[We shall be pleased to hear from Mr. Faul, on the subject of Irrigation at any future time.]

Agricultural Engineering.

In a recent article, entitled "The Coming Engineer," *Engineering* speaks as follows of the desirability of engineers turning their attention to agriculture:

"Engineers must not sit down because there are no more railways and docks and gas works to make just at present, but they must create new wants by showing what can be done that has not yet been done. We look with greater hope to the time when engineers shall have thoroughly taken up the grand theme of vital engineering, for the highest engineering of all is the science of life. Let the engineers show how to produce food on the largest and cheapest scale, draining and steam tilling, and collecting and applying all the wealth of organic matter now wasted under the name of sewage. Let them make England a garden, multiplying the number of cattle, and in every other way cheapening and improving our food. Let them not despise the term 'farmer,' and, if need be, let them be 'farming engineers.' Cultivation is still in a rude state, and it is the business of the real engineer to improve it. Let not our army sit down, one by one, in their little close preserves at home, but be stirring to do good. Let them find towns to drain, marshes to recover, and agricultural districts to improve. Such pursuits are not unworthy the attention of the representative body of modern practical science, and we are convinced that the reward would greatly exceed all present anticipations."

LOOK TO YOUR SEED.—Sow only the best. It is an irreversible law of nature that "like produces like," and he who sows or plants poor seed, may be certain that he will reap a poor harvest. If we breed from poor animals—horses, sheep or swine—we shall certainly *not* improve our stock, but the reverse. And the same is true of grains and vegetables. This fact appears now to be universally recognized, but it is not so strictly observed in practice as it should be. Indeed, by many it is neglected to their own detriment. Be careful in selecting seed from your own crops, to select the best, and in buying from those of others, to buy the best.—*Ed. Germantown Telegraph,*

Garden Work for April.

The principal matters to be attended to in the garden, during this month, are as follows :

Sowing Cabbage Seed.—If cabbage plants have not been raised in a hot bed, and seed is yet to be sown in the open air, select a border having a Southern exposure, and well protected from the North and Northeast winds. Manure the bed heavily with rich, well rotted manure; dig the plot over completely and rake the soil fine. Now, sow in drills, cabbage seed of such varieties as may be preferred, to succeed the earlier plants, of which we shall speak presently. When the plants come up, water them occasionally of an evening, especially in dry weather, and if they are troubled by the fly give the bed a light sprinkling of flour of sulphur, or a dusting of soot if sulphur cannot be had.

Setting out Cabbage Plants.—Cabbage plants that have been raised in a hot bed can be planted out this month. Wherever they are planted to mature, the soil should be moderately rich. Dig the ground over carefully, rake all fine, and choosing, if possible, a moist, cloudy day set out the plants in rows running North and South, three feet by two and a half feet apart. If, however, at the time of planting, and subsequently, the weather should prove dry, water the plants every evening, after sunset, until rain occurs.

Siberian Kale.—Prepare a bed early in the month and sow Siberian kale seed for sprouts during the summer. A bed of twenty feet square, if well manured, will furnish sufficient kale for a large family.

Early Peas.—Continue to drill in a few rows of peas at intervals of ten days, throughout the month, to secure a continuous supply.

Beans.—Plant dwarf beans, and continue to plant a few rows at intervals of ten days.

Lettuce.—Plant out lettuce plants from cold frames for heading, and sow lettuce seed every ten days for a further supply.

Radishes.—Sow radish seed at intervals of a week, throughout the month.

Spinach.—Drill in a few rows of spinach seed.

Carrots and Parsnips.—Sow carrots and parsnips for winter supply. For mode of culture see Farm Work in this number, or Garden Work for March.

Beets.—Drill in beets for the general crop. For mode of culture see Farm Work.

Sowing Onion Seed.—Sow onion seed in rich and well prepared ground during the early part of the month.

Celery Plants.—Celery plants may now be taken from the hot bed and planted in a nursery bed three inches apart, where they should remain for the

space of five weeks. After transplanting they will require frequent watering.

Sowing Celery Seed.—Prepare a bed about the middle of the month and sow celery seed for the general crop.

Salsify or Vegetable Oyster.—Drill in a few rows of this excellent root. The soil should be light, rich, deeply dug, and well pulverized. Draw the drills ten inches apart and half an inch deep. Drill in the seed freely, as many will not germinate. Cover with the back of the rake and press down the earth firmly. The after culture is precisely the same as for carrots, parsnips and beets.

Parsley, Thyme and Sage.—The seeds of all these herbs may now be sown.

Rhubarb or Pie Plant.—Prepare a border having a Southern exposure; make the soil fine and rich and sow the seed of rhubarb or pie plant.

Early Potatoes.—The planting of sets for early potatoes cannot be deferred later than the first of this month. They should have been planted three weeks ago.

Small Salading.—Sow seeds of small salading at intervals of a week, throughout the month.

Nasturtium.—Drill in a row or two of nasturtium seed for pickles.

Red Peppers.—After the middle of the month prepare a bed for red peppers and sow the seed.

Tomatoes and Egg Plants.—These should be forwarded in a hot bed. Where such has not been the case, select a warm border and sow the seed of both.

Water Melons.—Towards the close of the month prepare the hills for the reception of melon seed. A bushel of well rotted manure will not be too much for each hill where the soil is poor. The soil best adapted to the growth of melons is a light sandy loam. The distance of the hills should be six feet apart.

Strawberry Beds.—Keep the strawberry beds clean of weeds, water them freely in dry weather. Do not be afraid to water the plants, even when in blossom, provided the watering take place after sunrise. The best top dressing for strawberry beds is woods mould mixed with a small quantity of wood ashes.

Shrubberty.—All kinds of shrubberty may now be planted out. Towards the close of the month, however, is considered by many horticulturists to be the best time for planting evergreens.

Grape Vines.—Grape vines may be planted out during the first week of this month.

TO DISTINGUISH EDIBLE MUSHROOMS FROM THOSE WHICH ARE POISONOUS.—Sprinkle a little salt on the spongy part, or gills of the mushroom; if it turns yellow, it is poisonous, but if black, it is wholesome. An experienced eye, however, is generally a sufficient test.

The Florist.

FLORICULTURE---April 1869.

BY W. D. BRACKENRIDGE, Nurseryman and Florist,
Govanstown, Baltimore County, Md.

With the horticulturist, the month of April is perhaps the busiest of the year, owing to the rapidity with which vegetation is stimulated into action, and as January and February were remarkably mild, causing the buds of ornamental and other trees to swell so as almost to burst their winter coat; and many of the less hardy kinds have, during March, been injured by severe frost and cold winds; we recommend that artificial winter protection to plants and trees be not removed all at once but by degrees.

In the Greenhouse and glass-frame department every thing ought to be in fine order. Azaleas will now be making their new growth, and require light and air at this, as well as at all other times, in order that the wood may be short and robust. During the period that Camellias are making their young wood, they should be kept partially shaded, and held in a moist temperature ranging from 60 to 75 degrees, observing to syringe them well in clear weather. Owing to plants increasing in size, the want of space is often felt at this season, therefore the half hardy kinds ought to be removed to well protected cold frames, covering them with mats at night, in cold weather, with such treatment, *Verbenas*, *Cinerarias*, *Calceolarias*, *Pansies*, *Ten-week Stocks*, and even *Geraniums* do much better than when grown in the Greenhouse.

As a general thing, the season for propagating by cuttings will soon cease, we would therefore advise that all rooted cuttings and seedlings be potted off at once, and the more robust kinds be removed by degrees to the cold frames. *Lantanas*, *Fuchsias*, &c., for summer blooming, will require to be shifted into larger pots; prune the plants into shape, and keep them neatly tied up to stakes. Propagate *Chrysanthemums* by division of the roots, and by cuttings, these if grown in rich earth, and their tops pinched back two to three times, will make fine bushy plants.

If young plants of *Dahlias*, by cuttings of the tops are wanted, the old roots must be placed in heat without delay, and we would here remark, that *Dahlias* propagated in this way bloom much better than do the old roots.

Roses that have done blooming, can be pruned back, and the cuttings put in for stock, placing the old plants in a light situation.

During the spring months there will be a constant necessity to change the plants in the Greenhouse from place to place, so that a lively and elegant show may be maintained, as many will be going out and others coming into flower, but by no means, when a plant has exhausted its bloom, thrust it aside into a dark corner, but rather give it a good position, so far as light, heat and air is concerned, so that the wood may be well ripened for the coming season.

Keep insects in subjection—green fly is easily destroyed by fumigations of tobacco, while red spider and thrips are readily kept under by syringing with pure soft water; and a weak solution of whale oil soap, kills the cocoon.

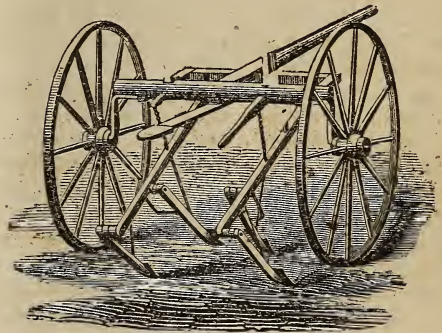
In the Ornamental Garden Department there ought to be a great deal of work done this month, as trenching, digging, making new flower beds, walks, roads, planting trees and shrubs, pruning such kinds of roses as *Bourbons*, *Teas*, *Hybrid Perpetuals*, all of which should be cut close, so as to make them flower well, while *Noisette* and *Mosses* do not require to be cut so much back.

Beds of *Pinks*, *Pansies*, *Carnations*, *Delphiniums*, Sweet *Williams*, *Fox Gloves* and *Anterrhinums* can now be planted with safety, while perennial *Phloxes* and herbaceous *Pæonias*, *Spiræas* and other border plants of like habit can be multiplied by division of the roots.

So soon as the weather appears settled, the *Hyacinth*, *Tulip* and *Lilly* beds should be uncovered of their winter traps, and the earth stirred between the rows with a hoe; and towards the end of the month, or so soon as the ground becomes warm and dry, annual flower seeds should be sown in the open ground; little is gained, but much loss often sustained by sowing or planting when the land is cold or wet.

Give air freely to cold frames in fine weather, and as it becomes warmer the sashes can be left off altogether at night.

KYNETT'S CULTIVATOR.



The above cut represents Kynett's Cultivator which was exhibited at the late Iowa State Fair. The committee on implements speak of it as follows:

"Claims simplicity, compactness, and adaptation for its work. Wheat and oats can be put in with it, either in stalk or stubble ground. It is a good marker, forming lines from 18 inches to 4½ feet apart."

The following is Mr. Kynett's account of it: "I will give its history and qualities in brief. I claim for my machine simplicity, durability, ease of management by the operator, and ease of draft to the team over any and all others that it has come in competition with, which includes a number of State and County Fairs. It is simple, because there is but little of it, but one tenet in all the frame work—every piece of timber is straight which makes it not only simple but durable, easy for the operator because he controls the plows with his feet, leaving the hands free to manage his team—each plow is independent of the other—the most crooked corn can be tilled better than by any hand plow in use. Some may say that is saying a good deal—well, it is simply the statement of all who have used it. It is easy for the team, because it is just in the draft of the team, an expression which all practical farmers well understand—and last, though perhaps not least, it is as good a seeder as the best in use and perhaps quite as cheap, it is also a number one marker for corn or other things requiring a marker for check row planting. It is desirable, because it can be made by any ordinary mechanic and requires but little material except tongue and wheels, the whole requiring only some 14 feet lumber. Address H. O. Kynett, Lisbon, Iowa.

Horticultural.

CULTIVATING ORCHARDS.

Many farmers are puzzled to know whether they had better cultivate their orchards or keep them in grass. It is impossible to lay down a rule that will be applicable in all cases—that is, we can neither say, do one or the other, for the whole thing depends on circumstances. Let us reason a little.

Everybody knows that trees will grow faster and better if the ground is cultivated and manured.—Now what is desired? The growth of the tree? Then cultivate. A young orchard not old enough to bear, may, as a general thing, be stimulated with propriety. First make the tree, and when it is large enough that you think it ought to begin to bear, then check the growth of wood. I am writing about apple trees. Whatever checks the production of wood tends to produce fruit.

First make your tree, and make it rapidly. But remember this, if you make it grow too fast, the wood may not mature well, and the cold of winter may kill it. In very rich soil, by cultivation there is danger of this result, where the winters are very cold. Here the farmer must use his judgment. It is best to keep between the extremes. Put out the trees, if starting a new orchard, and cultivate and keep it up until you see a very large growth in one year. Then stop cultivating, and lay down in grass. The next year the growth will be less. The idea is, when starting your trees, start them fast, and keep them going as long as they do well; and in a great majority of cases it will be found that they do not suffer from growing too fast and consequent immaturity of the wood. Indeed, immunity from danger from this cause is the rule, injury the exception. Of course, these exceptions will be more frequent as we move North, or where it is colder in winter. But south of latitude 43° I think there is little danger in forcing young apple trees into the most rapid growth.

Having produced the tree—that is, when it has a considerable size, and you think it ought to begin to bear some, retard the production of wood, and you will get fruit. The rule here is, that a tree cannot or will not produce largely of both wood and fruit the same season.

Too early fruiting of a tree is not good. I believe its tendency is to debilitate a tree. No one doubts this is true of berries and grapes, and it probably is equally so of trees. The production of fruit is the process of reproduction—propagation—and the practice should be to secure maturity first, then propagate. This is so with animals, and I believe also with many of the fruits. If the foregoing

statements are correct, the thinking man can correctly decide whether it is best to cultivate his orchard at any particular time or not.—*Cor. Journal of Agriculture.*

The Way to Set Out Apple Trees.

Daniel Harrington, Tionesta, Forest county, Pa., writes:

"I would make a few remarks regarding the decay and barrenness of apple trees. In the spring of 1840, I set out an orchard of apple trees in the common way, by digging a small hole just large enough to hold the roots of the young tree, then putting in the tree and filling up the hole around it. The orchard was set out on creek bottom, sandy loam, and cultivated sometimes in corn and oats, with intervals of seeding down to clover and timothy. About half are now dead; of the balance, some bear every year and some every other year. I am satisfied that the reason of trees decaying and not bearing, is found in the fault of the first setting out; for instance, when young trees are removed from the nursery, they are taken out of a soil highly cultivated and manured; they are then set out in the usual way by putting the roots down in the subsoil, a soil destitute of all vegetable matter. Is there any wonder that the tree does not thrive, or that one half of them die? About six years ago a neighbor of mine set out an orchard of grafted trees from the Rochester Nursery, State of New York, as follows: He put them on high ground, and dug holes three feet in diameter and two feet deep. He filled the holes with stones broken with a sledge, giving a layer one foot or eight inches deep. He then covered the stones with the soil taken from the holes, mixed with compost or well-rotted barn-yard manure, and set in the trees on this surface, and filled up around the tree with the best sod that he could get, putting the subsoil as far from the tree as possible. Those trees are the cleanest, thriftiest trees, and grow the fastest of any in the neighborhood, although they have had no attention in the way of washes or manures since they were set out. The reason is that after a heavy rain, or the melting of the snow in the spring, the water drains off through the stones, leaving the roots free from cold water; the roots, also, do not go down into the subsoil, which is destitute of all vegetable matter. I have myself set out some twenty-five apple trees in this way, which, although too young to bear, are growing very nicely. It is a great deal of extra labor to set out trees in this manner, but I believe it will pay in the end, because the trees grow so much faster, and are not so liable to be attacked by insects."

The world's annual crop of tobacco is estimated at 432,400 tons.

Successful Apple Orchard in Maryland.

Wilson Marshall, in Cecil county, Maryland, just over the Pennsylvania line, has sixty-five trees on one acre and a half of land. A few years ago he sold, in one season, \$265 worth of apples. His system of management he considers the true one. His orchard was planted on the south side of a slope, and the ground was worked until the trees were ten years old; great care having been exercised in planting the trees, keeping them straight, and well pruned. The ground was well limed and manured, and good crops of grain, potatoes, etc., were obtained whilst the trees were small. He prunes about the first of June, and trims off all suckers and shoots in August. This summer pruning is an advantage, in the fact that the cuts grow over with new bark and are prevented from decaying. To prevent the growing of shoots, the trees should be scored around the butts. Since the trees have become large, the manuring and liming has not been abandoned, but the ground is treated to a liberal coat yearly, and occasionally plowed. By this course of treatment Mr. Marshall's orchard has never entirely failed to bear since the trees were two years planted, whilst orchards in the same neighborhood, planted about the same time, never bore rightly, and are now almost gone. Mr. Marshall has been selling his early varieties—Townsend's and Calebs—in Oxford, this last season, at \$2 per bushel.—*Horticult.*

Repairing Lawns or Grass Plots.

Just as soon as the frost is well out of the ground, even before it has well settled, lawns or grass plots should be looked over, to see what is needed to make them smooth and a mat of turf during the coming summer. If there are any bare or thin spots, then the first thing should be to procure some grass seed and sow over them. Blue grass and red top in equal proportions, and sown thickly, say at a rate of six bushels to the acre, will answer for filling up bare places; although, if the whole lawn was to be made anew and seeded, then creeping bent grass and white clover should be added. After the seeding, scatter over the whole surface about half inch deep of fine fresh loamy soil, or perfectly decayed compost or manure; then sow Plaster Paris (gypsum) at the rate of one bushel to the acre, and finish by rolling with a heavy roller. If you have no roller, and the grass plot is small, get two planks as wide and as long as you can easily handle, lay down first one and then the other, alternately treading back and forth over them, and so press the whole surface, packing the old grass roots and cover the fresh seed.—*Exchange.*

Wheat looks fine in Southern Indiana, and the fruit prospect is promising.

Farm Stock in the United States.

We learn from the report of the Department of Agriculture that horses have increased slightly in most of the Western and Southern States, but very little in the Middle and Eastern—not enough to keep pace with the increase of population in the Atlantic sea-bound States. Nebraska, Kansas, Missouri, Iowa, Minnesota, Wisconsin and the Pacific coast States exhibit the largest increase. The numbers are, however, not equal to the demand, as is shown by the general though small advance in prices. The increase of mules is also slow, and the range of prices appears to be higher than last year.

The returns of oxen and other cattle show a positive decrease in New Jersey, Maryland, North Carolina, Florida, Texas, Kentucky, Ohio, Indiana and Illinois, the diminution amounting to five per cent. in the latter State. In milch cows a reduction is reported in Texas, Ohio and Illinois, and some of the Southern States. A general increase in prices of cattle is reported.

The reduction in the number of sheep appears to be general, the only exceptions being Rhode Island, Tennessee, Missouri, Minnesota, Kansas and the Pacific States. The loss cannot be less than ten per cent. In some States it is placed at 15 or more. The prices of sheep have declined slightly in certain sections and advanced in others. In Connecticut and in our own State, where unusual attention has been given to mutton breeds, prices have been fully maintained. In districts where the Merino stock monopolizes sheep-walks, the decline is general and in some sections heavy.

The report states, moreover, that the returns of swine mark a very decided reduction in numbers of fattening hogs, amounting to 15 per cent. in a large portion of the Ohio valley. The prices are largely increased in many States—25 or 30 per cent., and not unfrequently 50 or 60 per cent.

LOOK TO YOUR FENCES.—Among the first duties of the spring we may mention the mending of old and the construction of new fences. A farm but poorly enclosed is almost worthless; it is a perpetual source of perplexity, and the annoyance is often of a nature that sets both precaution and patience at defiance. Whenever it is necessary to construct a new or to reconstruct an old line, it should be done in the most thorough manner. Good materials and good workmanship are as valuable here as in any other department of the art. This should be always borne in mind.

Good fences secure good neighbors, and good neighbors are a treasure in our cold, selfish world.—*Ed. Germantown Telegraph.*

Green peas have made their appearance in Savannah.

THE MARSH HARVESTER.



The Marsh Harvester now enters upon its fourth year with extraordinary prestige. The favor with which it has been received, and the success attending its introduction, has induced the proprietor to place before the farmers of Maryland and the South during the coming season, machines yet more complete and more perfect.

In the harvest of last year, it was demonstrated beyond question, and to the entire satisfaction of hundreds of farmers, that the claims of the Marsh Harvester as a labor-saving implement, are without parallel, and further, that these claims have been fully established. Indisputable evidence is offered that three men (and in many cases two men) will, with one pair of horses, cut and bind as much grain as is generally done by five or six men, with the ordinary style of reapers. The great economy in the use of this machine, is possibly the strongest recommending feature. Cases are on record where a single person has bound an acre of oats, producing fifty bushels to the acre, in forty. And at the recent Minnesota State Trial of Implements, the Marsh Harvester cut the allotted acre, and two farmer boys bound it, in thirty-nine minutes. It is not expected that such speed will be attained under all circumstances; there is, however, sufficient testimony to warrant the assertion that two binders on this machine will bind as much grain as four persons on the

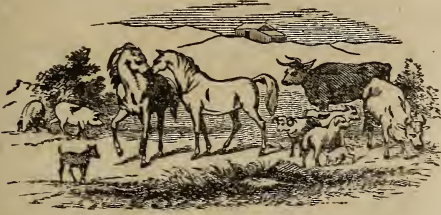
ground, (saving thereby the labor of one person to rake off,) and that the expense of harvesting is by this method reduced fully one-half.

The saving of grain alone is quite an important item. Every portion of it that is cut must be elevated to the binder's table, and of necessity must be bound; the result is, that a harvest field after having been traversed by this Reaper, is clean beyond all precedent, well-bound sheaves are the result, and slovenly work entirely unnecessary. The saving of grain by this manner of harvesting will contribute very materially to the payment of the machine.

The Marsh Harvester is manufactured by Emerson & Co., of Rockford, Illinois, and for sale by S. Sands Mills & Co., *Maryland Farmer* office, where a machine will be placed on exhibition.

THE PEACH PROSPECT.—We learn, says the *Denton Union*, of the 27th March, from Mr. Alex. P. Sorden, one of the largest and most experienced fruit-growers in this county, that the prospect for a crop of peaches in his immediate neighborhood is excellent, and that, should no unfavorable weather set in, the crop will be abundant. He has been in communication with fruit-growers throughout this and the lower portion of the peninsula, and receives a favorable response from all.

Live Stock Register.



CHANNEL ISLAND CATTLE.

We append a report, says the *Turf, Field and Farm*, of a large sale of Channel Island cattle. It will prove of interest to our breeders here, and will give them an inkling of the estimation in which this valuable race is held there where it has been longest in competition with other races.

The demand for this breed for dairy purposes, is rapidly on the increase where it becomes known.—Practical men begin to find out that these diminutive Jersey and Guernsey cows give a concentrated milk, one gallon of which will make as much and finer butter than two gallons from most of the heavy Durhams, and that, too, they will do on pastures where the larger cattle would starve.

We have seen these Island cattle on their native pastures; we have seen quite as good here at Mr. McHenry's, in Maryland, and at the Clinton Stud Farm, on Staten Island; but we have seen better than any on the coasts of Brittany, in France, all the way from Morlaix to Grandville, and the butter made from them is infinitely the best made in France. We remember always calling for Brittany butter in Paris, because that from other provinces is never salted, and the Brittany butter always is. We see no reason why our importers should confine themselves to the Islands of Alderney, Jersey, and Guernsey, when they can procure at cheaper rates, larger animals of the same race, in the Departments of the Manche, Cotes du Nord, and Calvados. It is to be hoped some of our enterprising breeders will explore this as yet untrodden ground. Mr. Ficklin, of Virginia; Mr. Walters, of Baltimore; and many others have learned to appreciate the Percheron horse.—Let some of our dairymen do the same with the Brittany cows.

A herd of Channel Island (Jersey and Alderney) cattle, nearly 100 in number, belonging to Philip Dauncey, Esq., near Winslow, England, and considered the finest in Great Britain, was sold at public sale, October 24th. The fame of the herd brought a large assemblage of purchasers, and the prices realized were consequently high. The lowest priced

cow bought 15½ guineas, and the highest priced 100 guineas. The latter was purchased by Mr. Garne, and among the other purchasers were Lord Chesham, Sir H. Verney, Duke of Grafton, Duke of Bedford, Colonel Spicer, Mr. W. A. Gilbey, etc. The average of the cows, fifty-six in number, was £30 4s. Seven in-calf heifers brought from 35 to 60 guineas, the average being £55 10s. Five heifers, out with young bull, brought prices ranging from 28 to 56 guineas, or an average of £44 2s. The calves were sold in pairs, and brought from 25 to 51 guineas per pair, and the bulls, five in number, brought from 20 to 60 guineas each. The total proceeds of the sale amounted to £3,912.

Lice on Cattle and Sheep.

The spring is the season when most annoyance is caused by these parasites. We have so many letters asking for and recommending cures, that we are induced again to allude to that wonderful effective destroyer of such vermin, *Carbolic acid*. This is used in the form of soaps, which may be easily applied in water, making a moderately strong suds.—Cresylic acid is a cognate substance, almost always associated with carbolic acid, and under the trade name of "Cresylic Soap," an excellent article is advertised and furnished. We have employed this soap to rid our shelves of ants, our cupboards of cockroaches, poultry of lice, dogs and cats of fleas, and not having occasion to use it upon our horses or neat stock, have supplied acquaintances whose stables were infected. We have seen prescribed a bath of Cresylic Soap and water for a newly arrived immigrant, and in every case of its application have had the satisfaction of learning of its efficacy.—Farewell to mercurial ointment, that efficient, but very dangerous article in careless hands! So long as we can obtain carbolic compounds, we banish it.—*American Agriculturist*.

Boring for Hollow Horn.

In addition to the cures already given for Hollow Horn, I will give my cure. I have known many remedies to be tried for this disease, such as boring the horn on the under side, winding tarred cloths around the horns, slitting the tail, &c., and have known the following remedy to effect a cure, when these had failed, and have never known it to fail.—As soon as you are certain that the animal has the hollow horn, take a gimlet, ($\frac{1}{2}$ inch is large enough,) and bore a hole, about three inches from the head, *entirely through the horn*, and put in vinegar, salt, and pepper as hot as can be borne with the hand. In six or seven hours the matter will begin to start from the *upper* orifice, while the lower one remains dry. The matter will continue to flow until the cure is effected. Now here is a question for your readers, why does the matter start from the *upper* orifice, instead of the lower one?—*Cor. Ohio Farmer*.

Kitchen Garden.

LIMA BEANS.

All will agree that there is no bean grown at all to compare with the Lima, especially when eaten green, but even as a winter-bean. Used in the winter it is different from all others from the fact that it is nearly equal in quality to what it is in its green state. But all may not know that it is the most difficult of beans to raise. Its principal enemy is a wet spring. It is of so large a size and infirm that when planted, if the weather is moist, it becomes soaked through and rots, sometimes even after it has sprouted. It not unfrequently happens that two and even three plantings are necessary and the crop fails afterwards. Sometimes a hot, dry August renders the vines barren; sometimes heavy rains just at the period of inflorescence will "do" for them.

The best mode to raise Lima beans successfully is to select a dry spot for the bed, plant the poles firmly, elevate the hills, and set the seed perpendicularly just under the surface, first *greasing* the seed with lard or butter. If the soil is rich and not too wet the chances are that a good crop will be the result.

But to insure a good crop as nearly as it can be done, plant the beans in a shallow box filled with the best soil about one inch each way, say about the middle or 20th of April, place the box in a hot-bed, or in a sunny window of a constantly heated room of a house, and start the plants there. When the period arrives for transplanting—that is, when the time of probable frost is over—set them carefully out by the poles, taking as much earth with them, sufficiently moist to adhere, as possible, make a hole with a round pointed stick of suitable size, and draw up the earth and press gently. Should a frost threaten, cover with old papers, straw or hay, the former being the best, as it is easier to manage, makes less dirt and can be saved for future occasions. A few clods will keep the paper covering in its place.

But this should be what might be called the early or first crop of Limas. The second crop should be planted in the usual way, and from the two it would rarely happen that enough for summer and winter use—in case the plot of ground is large enough—would not be secured.—*Ed. Germantown Telegraph.*

All About Cucumbers.

How to Raise Early Cucumbers.—1. A good method to produce early cucumbers is the following: Make a trench at the warmest place of the garden; into this put old manure—about three inches—and on this good earth—three inches—on this plant the seeds, and cover them with sawdust—two or three inches. Cucumbers thus treated are said to come earlier, to endure rain, drouth, and even a little frost, far better than those treated another way. Against severe night-frosts they should be protected by boards.

2. Take middle-sized flower-pots; fill them two-thirds with good soil; put the seeds on this, and cover with sawdust; sprinkle with warm water, and put the pots near the stove. On the appearance of the plants, place the pots near the window. Care should be taken to harden the plants before trans-

planting them into the garden, by admitting air to them both day and night.

3. Take egg shells (the hole to be on the upper end three-fourths of an inch,) fill them with good soil, and therein plant the seeds. Plants thus raised, kept either in the house or hot-bed, are easily transplanted.

How to Raise Many Cucumbers.—1. Never take fresh seed of last season, but always take seeds two to four years old. Who cannot get old seed, should have his fresh seeds dried near a warm stove during several weeks. Some gardeners, in order to obtain this end, carry their seed in their pockets. Old cucumber seed will bear earlier and more fruit. Fresh seed will make weak plants, and is longer in germinating.

2. Pinch off the end of the main shoot. This will strengthen the growth of the vine, the laterals will come out sooner, and you will get more fruit before frost sets in again.

How to get Fine Flavored Cucumbers.—1. Get your seed from a reliable seedsman.

2. Soak your seed in milk for about twenty-four hours before sowing.—*Horticulturist.*

Beans—Bush or Snap Shorts.

These may no doubt be raised at the South, and shipped North with advantage; care being taken so to pack them as to obviate fermentation, a most formidable evil to be guarded against at every point. The snap, or bush bean, is of many varieties, but of course the early ones are those of greatest interest in the present case; and the Brown Six Weeks, is perhaps, all things considered, the best. The red Valentine, not quite so early, commands a higher price in market, but if only one sort be raised, let it be the Six Weeks, because the earliest. We should recommend the shipment be made in slatted boxes, or in flour barrels bored freely with an inch auger, the head a piece of canvass. The culture of the bean is very simple. Almost any one who is familiar with the culture of corn or cotton, may successfully manage a crop of beans. The cardinal points to be observed are good manuring in the drills, and good culture.

The Lima Bean is always in demand; it will bear transportation, and will be certain to command ready sale at good prices—if more are raised than can be sold in the pod, a market can be found for them when dry, in which state it is an admirable winter vegetable. When planted in plots of an acre or more, it is a good plan to plant the poles so the ground may be tilled two ways. Be sure and manure liberally; broad-cast over the ground before the poles are placed, and afterward around each pole.—*Landreth's Gardening in the Southern States.*

EGG-PLANTS AND TOMATOES.—Every person can raise his own tomato and egg-plants, with very little trouble. Select a warm border, enrich heavily with horse-manure, pulverize the ground thoroughly, and sow pretty thickly, thinning out if necessary. A common window sash or two, raised two or three inches over them, on any kind of supports, will greatly facilitate their vegetation and growth. If they are transplanted into other beds when three or four inches high, so that they shall stand about three inches apart each way, it will cause them to become very stout in the stem, and they will branch considerably, making much stron-

ger and more productive plants. Tomatoes should not be set out for a crop until the ground is warm and weather settled, say the last of April or first of May, the latter perhaps the better. Egg-Plants should never be set out before the *last week in May*. We prefer the Fijii tomato, and the Long Purple egg-plant, though many other excellent varieties of the tomato are now introduced, some of which it would be well to cultivate also. Not a day should be lost in getting in the seed.—*Ed. Ger. Telegraph.*

THE CULTIVATION OF HORSE-RADISH.—There is nothing easier to cultivate than Horse-Radish, and it should be found in every garden. The elaborate instructions drawn out which we have seen in some journals, is all bosh, or at least only tends to deter people from raising it. All there is to do is to dig up a bed full spade deep, in a rather low, moist place; manure heavily as for any other garden crop. Slice a radish from the crown—two or three inches down, each of course with a piece of the crown, however small, and plant two inches below the surface, *and it will come*. For family use a bed ten feet square will furnish enough all the time for a generation, without farther trouble or replanting. This is all.—*Ed. Germantown Telegraph.*

IMPROVEMENTS IN HOWARD AND MONTGOMERY COUNTIES.

The subject of internal improvements is at this time engrossing the attention of our people in lower and upper Southern Maryland. Railroads and turnpikes are being projected which, when completed, will open a mine of wealth to the people of the counties and the City of Baltimore. In addition to the Potomac Railroad, &c., now in progress, the people in Howard and Montgomery counties are just now discussing the preliminary steps to connect Ellicott City and Clarksville by means of a turnpike. A correspondent (D. L.) in the *Howard County Record*, in discussing, among other matters, this enterprise, says:

Chief among these enterprises, is the Ellicott City & Clarksville Turnpike Co., having for its object the connection by turnpike of Ellicott City and Clarksville, ten miles distant; following the old Columbia turnpike three miles, to its junction with the county road leading to Clarksville and Montgomery county, thence by the county road direct to Clarksville, seven miles. The land through which this turnpike will pass is susceptible of the highest degree of improvement, for five reasons: Its proximity to Ellicott City and Baltimore markets—the character of the surface of the land—the nature of the soil—the healthfulness of its climate, and its abundant springs of pure cold water. Its proximity to these two cities renders it desirable—first, as building lots for those engaged in business in either city, and as market farms for market gardeners. The smooth and undulating character of its surface, is a valuable adjunct to its development and improvement, and the nature of the soil (sandy and clay loams) renders this development rapid and this improvement easy and permanent.—

Land near Ellicott City now selling at \$100 per acre, will be worth from \$150 to \$200 upon the successful operation of this turnpike. Land near Dorsey's Shops selling at \$50, will be worth from \$100 to \$125; and land that can now be bought near Clarksville for 35 and \$40 will bring under proper cultivation 75 to \$100 per acre. And here let me lay down one cardinal rule to aid the reader's reflections upon this subject:—The development of the resources of a country, and its consequent improvement, can take place only upon the route of a mode of easy access to land adjacent. Development in motion, and the laws which regulate one, govern the other, and development, like motion, follows the line of the least resistance—and the greatest resistance the wheels of Progress can encounter is, a mud-hole.

Why the disparity between the fine residences in the vicinity of Ellicott City on the Frederick turnpike, and the unoccupied lands on the Columbia pike and Montgomery road, only a short walk apart? Any one who has traveled these roads can furnish the answer.

The route of the projected turnpike leaves no room to doubt the remunerative character of the enterprise. It is not like boring for oil or sinking a mining shaft, which may or may not prove successful. This is not launching the frail raft of experiment upon stormy and untried waters. The increasing prosperity of one of the termini, rests upon an enduring foundation. The energy of its merchants and publishers, its legal talent and medicinal skill, are well known and commended; mechanical shops are found at intervals along the route, and midway the blacksmith and wheelwright shops have recently been purchased by one whom the people delight to sustain; and the other terminus, Clarksville, contains two enterprising mercantile firms, occupying spacious and convenient storehouses, a comfortable hotel, two blacksmith and two wheelwright shops, with other storehouses and numerous commodious residences, attesting the taste and industry of its inhabitants. Situated midway between Baltimore and Washington, its farmers hold the key to either market, and this central location gives it a commanding position which will make its property valuable, attractive and desirable. Under the favorable operation of the turnpike, this town will soon become large and flourishing to an incalculable degree, if its property shall be held under various ownerships. Instead of the settlement at Dorsey's shops, a prosperous village stand waiting for the footsteps of the master-workman, to raise its beautiful front by the side of fertile grain and grass fields. This is no scheme of speculators to open a howling wilderness. The wolf and panther have fled, the stumps even of barbarism have been extracted, and a civilized and refined people occupy their places and now propose to gather around them another product of their civilization and refinement, to the end that all may say, "Truly, the mantle of noble sires has fallen upon worthy children."

THE NEW ECLECTIC MAGAZINE.—The April number of this valuable Eclectic is received. It has no superior in the country. The editors announce that "the interests of 'The Land We Love,' formerly published by Gen. D. H. Hill, at Charlotte, N. C., and 'The New Eclectic Magazine,' are now united. The unexpired terms of subscribers to 'The Land We Love,' will be filled out with the 'New Eclectic Magazine.' In cases where the same person happens to be at present a subscriber to both magazines, the credit will be extended on the books of 'The New Eclectic Magazine' till the entire obligation is met." Turnbull & Murdoch, publishers, Baltimore, Md. Terms \$4 per annum.

Ladies Department.

THE LOVED AND LOST.

The following poem, from the Church of England Magazine, will come like a "song in the night" to many a stricken heart:

"The loved and lost!" why do we call them lost?
Because we miss them from our onward road.
God's unseen angel o'er our pathway crost,
Looked on us all, and, loving them the most,
Straightway relieved them from life's weary load.

They are not lost; they are within the door,
That shuts our loss and every hurtful thing—
With angels bright, and loved ones gone before,
In their Redeemer's presence evermore,
And God himself, their Lord, Judge and King.

And this we call a loss! O selfish sorrow
Of selfish hearts! O we of little faith!
Let us look round, some argument to borrow,
Why we in patience should await the morrow,
That surely must succeed the night of death.

Aye, look upon this dreary, desert path,
The thorns and thistles whoso'er we turn;
What trials and what tears, what wrongs and wrath,
What struggles and what strife the journey hath?
They have escaped from these; and lo! we mourn.

Ask the poor sailor, when the wreck is done,
Whof, with his treasure, strove the shore to reach,
While with the raging waves he battled on,
Was it not joy, where every joy seemed gone,
To see his loved ones landed on the beach?

A poor wayfarer, leading by the hand
A little child, had halted by the well,
To wash from off her feet the clinging sand,
And tell the tired boy of that bright land
Where, this long journey past, they longed to dwell.

When, lo! the Lord, who many mansions had
Drew near, and looked upon the suffering twin,
Then, pitying, spake, "Give me the little lad;
In strength renewed, and glorious beauty clad,
I'll bring him with me when I come again."

Did she make answer selfishly and wrong—
"Nay, but the woes I feel, he too, must share!"
Or, rather, bursting into grateful song,
She went her way rejoicing, and made strong
To struggle, since he was freed from care!

We will do likewise, Death hath made no breach
In love and sympathy, in hope and trust;
No outward sign or sound our ears can reach,
But there's an inward, spiritual speech,
That greets us still, though mortal tongues be dust.

It bids us do the work that they laid down—
To take up the song where they broke off the strain;
So journeying till we reach the heavenly town,
Where are laid up our treasure and our crown,
And our lost, loved ones will be found again.

GOING TO KEEPING HOUSE.

A lady writer in the *London Public Opinion*, lays down the following rules for girls and young housekeepers, which are pretty good for general reading:

When a girl marries, she ought to a certain extent, to give up her acquaintances, and consider the company of her husband the best company she can have. The young wife must learn cooking carefully. There are many excellent cookery books, but she must not follow them implicitly.

My own plan, for some time after I was married, was to take some dish and prepare it once according to the recipe given, and note carefully what ingredients could be dispensed with. The second time I generally managed it at half the expense. A useful plan is to keep a blank book in the kitchen table drawer, and whenever a deviation from the orthodox

cookery book is made, to jot it down. Do not wait till you have washed your hands; let the book be finger-marked, rather than lose an idea.

You will thus learn more of household economy than if you trusted to memory alone, and when your daughters grow up, what a fund of practical information it will be for them. To a great extent the celibacy of our young men is owing to the way in which girls are brought up. Through mistaken kindness, mothers often do themselves what they ought to make their daughters do. Let them teach housekeeping on a fixed methodical plan, and they will then learn their history, French and music all the better.

It is natural and right that a mother should wish to see her daughters well educated, and even highly accomplished, and it is a mistake that good and careful education would unfit a girl for the homely duties of cooking, dusting, etc.—On the contrary, those duties would be better performed, and if mothers would at the same time they seek talented instructors for their daughters, impart to them some of their own culinary talent, there would be more good wives and more marriages.

Little girls should be taught, as early as possible, to perform simple household duties neatly, and as they grow older let them become gradually acquainted with the theory of housekeeping in such a manner that when they are married they will be able to adapt themselves to their circumstances, and be useful as well as pleasing companions to their husbands. Let none of my unmarried sisters suppose that I wish them, when they marry, to become mere household slaves.

Most young men when they marry have fair prospects of advancement, and should they be steady they may in time be able to keep not one servant only, but several, and their wives' knowledge of housekeeping prove no less useful to them than that it was when they had no servant at all.

Blue Grass Girls.

A correspondent of the *Cincinnati Commercial* says: "It is a solemn fact not to be disputed, that the blue grass girls of Kentucky are the handsomest in this country. We would not say it if we could help it, but it is true, and we may as well admit it. Why they are prettier than other women is easily told. The fine climate they live in, the hard limestone water of the region, and the free and active open air life they lead, develops them to perfection, and gives them a clear and beautiful complexion. Their features are not better than those of the women of other parts of the country, but their forms, eyes, hair and skin are extremely fine.—There is, however, another reason why the Kentucky blue grass girls are pretty, and that is because they give their whole attention to being pretty. They dress with great taste, and you never see one but she is dressed in neat and fashionable attire. The farms are large, and most of the people here are rich—so the girls can afford to dress. We warn impressionable young men in the North not to come down here for a wife unless they have a pocketfull of rocks; for the pin-money of a Kentucky girl amounts to more in a year than the products of a small Northern farm would bring. As wives, as helpmates, they are not desirable; but as ornaments for fine houses they are unsurpassed. They may not be able to work, but not one of them but can sing, dance, ride, and flirt; and the more they are married the worse they will flirt. They are high tempered, haughty, and hot-blooded; and the best way is to get along as quietly as possible with them, for if they get on their mettle they are anything but comfortable companions."

ARTLESS SIMPLICITY.—One of the sweetest incidents which we have noticed for many a day—and one which shows the effect of early training, assisted by a pure and undefiled imagination—has just fallen under our observation. It is thus related: A lady visited New York city, and saw on the sidewalk a ragged, cold and hungry little girl, gazing wistfully at some of the cakes in a shop window. She stopped, and taking the little one by the hand, led her into the store. Though she was aware that bread might be better for the cold child than cake, yet desiring to gratify the shivering and forlorn one, she bought and gave her the cake she wanted. She then took her to another place, where she procured her a shawl and other articles of comfort. The grateful little creature looked the benevolent lady full in the face, and with artless simplicity said—"Are you God's wife?" Did the most eloquent speaker ever employ words to a better advantage?

LOVE is not to be reason'd down, or lost
In high Ambition, or a thirst of Greatness:
'Tis second life, it grows into the soul.
Warms every vein, and beats in every pulse:
I feel it here; my Resolution melts.

OATS.

From *Deitz's Experimental Farm Journal*, edited by Geo. A. Deitz, Chambersburg, Pa., we extract the following on oats:

Varieties of Oats.

Oats or *Avena* is a genus of grasses containing many varieties, some of which are cultivated for grain, others for fodder. The Barley, New Brunswick, Surprise and Swedish oats, are classified as *Avena*. The Potato, Hungarian, Siberian, Black and all side oats are classified as Tartarian oats, or *Avena Orientalis*. Naked oats, or *Avena Nuda*, differs from the side or Tartarian varieties in having the chaff adhere very slightly to the seed, which falls out easily in handling and especially if left to get over ripe before cutting. Chinese Oats, *Avena Chinensis*, is very prolific and resembles Naked oats, somewhat in its characteristics. It shells readily, often loosing largely in gathering the crop. All these varieties grow from four to six feet high except Short oats, *Avena l revis*, which is a deteriorated variety and not profitable to cultivate.

The first mentioned varieties are the best, the most profitable to cultivate, and belong to the common oat species. They are susceptible of great improvement by careful selection and cultivation and can be made quite profitable to the grower.

The class of oats used as fodder or forage plants are the Downy oats, *Avena Pubescens*, and the Yellow oats, *Avena Flavesces*, referred by botanists to the genus *Trisetum*. There is another species of oats grass, *Forskali*, which grows abundantly in dry and hot countries. It is deemed a good forage plant because it will flourish in poor and sandy soil. Then there is the Bristle-pointed oats, *Avena Strigosa*, differing slightly from the other varieties in having the lower palea much prolonged, and instead of being two-cleft at the point is divided into two long teeth extending into bristles. The panicle is oneseide, slightly branched, the florets two or three in a spikelet, all awned, and the grain small. It is cultivated to a considerable extent in Europe where soils are thin and poor. Very similar to this is the wild oats, *avena futua*, of this country.—It is unfavorably regarded and shoots up in cornfields, sometimes growing so abundantly in meadows as to choke out other valuable grasses. Its awns hold a large amount of moisture which it expels in day-time and regains at night, making it resemble the *avena sterilis* a wild oats in the South of Europe called Animated oats or Animal oats, because they move about in an extraordinary manner through the twisting and untwisting of the awns. The seed of this and the wild oats are often used for fly in trout-fishing.

Drill in Your Oats.

In moderately rich soil, oats should be planted

with a grain drill, putting about one bushel, of forty-five pounds, to an acre. Ploughing the ground in the fall will enable you to sow oats much earlier than spring ploughing, and the earlier oats are sown the better are the chances for a good yield in quantity and quality. If the spring season be very wet, ground that has been ploughed in the fall can be sown almost as early as spring ploughing begins.—Late sown oats do not have time to mature, and, unless the season be very favorable, generally prove a failure. In most of the southern States, oats should be sown in January or February.

Oats that are drilled in are improved by stirring between the rows, the yield being often increased twenty per cent. First-rate soil is not necessarily needed to raise oats, but the richest soils always pay best. Seventy to one hundred bushels is not an extraordinary yield for the best kinds of oats on good soil. If the season be two wet to plough I prefer putting in oats with a shovel plough on clay soil. On sandy soil it yields best to drill it in with super phosphates.

One Bushel of Oats

Weighing 45 pounds is plenty to sow to an acre of ground. It should be drilled in, or, if sown regularly by hand, should be plowed in two inches deep with a double-shovel plow, and then harrowed. I find 45 pounds of solid oats equal in sowing to four bushels of light oats, weighing only one half as much. It is by sowing this light, indifferent oats that causes it to degenerate so rapidly. By running oats two or three times through the wind mill, and sowing the heaviest and best there will be fewer complaints of oats not coming up.

Sow Oats

As soon as the ground is dry enough, and drill or shovel plough them in. Sow them in February in the Middle States if the ground is dry; no matter if the ground does freeze, or snow fall on them. The earlier the oats are sown the better the crops. If the spring is backward and wet so that you cannot get the ground ploughed, harrow your corn stalks down, sow your oats, and use the double shovel plow to plow them in, then harrow level.—If you sow by hand two bushels per acre of clean oats is not two much. If you drill them in, one bushel and-a-half per acre is plenty.

Experiments

Here indicates that the Surprise, Swedish and New Brunswick, white varieties, are best on loamy or marly soils. Black, New Brunswick and all side oats yield most largely on heavy clay soils. Norway and common oats have failed. They are light, and too late in ripening, and are apt to be caught by dry weather, or destroyed by insects.

He only is a good farmer whose crops increase and whose stock improves year by year,

USEFUL RECIPES.

HOOF-AIL OR FOOT ROT IN COWS.—This disease makes its appearance sometimes between the claws of the foot, often in the heel, and extending up the leg, causing extreme lameness, loss of flesh, and loss of milk. It generally attacks one foot at a time, but will in turn, sometimes go into each of the other feet. Constant pain seems to be present with this disease, and as cattle have not the courage and endurance of resistance, it soon materially affects the condition of the beast. It sometimes appears in only part of the herd, but often runs through the whole dairy.—Whether it is contagious, or has been produced by some external cause, is not clearly ascertained. Some suppose that there is a constitutional tendency to disease of the foot in cattle resembling the rot in sheep. Many think it to result from the cattle standing or trampling in the mud, or being kept on moist land, but it attacks the cattle alike upon dry pasture and those that have tramped in muddy places. It appears in different seasons of the year. We have known it to go through a herd in March, when the ground was frozen and covered with snow.

It is often difficult to cure, and its appearance is becoming every year more common among the herds. Dairy-men do not like to see the disease in a herd, because if the cows are not speedily relieved, they fail in milk and dry up. We have known a good many cases where cows have been attacked, and became useless for milk during the season. We have seen dairymen pestered all summer with the disease, not knowing how to get rid of it readily, and having a few cases under treatment all the time, until the whole herd has been gone through, and then perhaps it would attack some of the animals a second time. Various remedies are recommended in the books. Some of them are worthless, and others prove effectual only in certain cases.

Cresylic Acid, Foot-rot Ointment, thoroughly cures and prevents the return of this dangerous disease. Anoint well with the ointment, and especially the diseased part, rubbing a little into the hair as high as the knee. In bad cases, where the disease was in the heel and upon the leg, apply the ointment and work it in by holding a hot iron near the foot. The foot must be cleaned previous to the application, by washing well with soap and soft water. When the disease was between the claws, and the animal fractious, it could be rubbed in by drawing a rope through the parts. One application, if thorough, will generally effect a cure but if all the parts are not reached by the ointment, apply again in forty-eight hours. Keep the animal in a dry, clean pasture or lot for a few days, and a cure will not only be effected, but the animal guarded from reinfection for a considerable period.—*American Stock Journal*.

FOR WOUNDS UPON A HORSE.—A gentleman in this city who is said to "know more about a horse than any other man, informs the *Maine Farmer*, that for a cut in the hoof with a cirk of the shoe, nothing is better than to pour in melted lard and rosin, equal parts, having it quite hot when put in. For a sprain, the best remedy is to use alcohol and beef's gall, putting one gall into a pint of alcohol, and keeping it for the purpose. Tincture of arnica universally used for sprains, &c., is believed by him to be weakening to the system (being very penetrating in its nature) and is wholly discarded.

The Commissioner of Agriculture says, that if our soil was cultivated one inch deeper, \$150,000,000 would be added to the wealth of the country.

PAMPHLETS, &c., RECEIVED.

MY TEN-ROD FARM; OR HOW I BECAME A FLO-RIST. By Mrs. Maria Gilman. Boston, Loring, publishers. This little book is the experience of Mrs. Gilman as a Florist and Gardener, showing how from great poverty she acquired a measurable competency from her avocation on a Ten-Rod Farm. It is told in a simple and affecting manner, and is really worth reading.

OUR OLD FOLKS' MAGAZINE.—The April number of this magazine has been received from Henry Taylor & Co. Baltimore. It is published by R. Hafeigh, and edited by D. Boyer Brown, of Philadelphia, and promises to rank high among our magazines. Terms \$3 per annum.

THE GALAXY.—The April number of this excellent monthly is received. Chas. Reade's new story is continued. It is an illustrated magazine, and each number indicates it one of progress. Sheldon & Co., 498 Broadway, N. Y. Price \$4, and it is worth it.

REPORT OF SURVEYS ACROSS THE CONTINENT in 1867-'68, on the 35th and 32d Parallels, for a route extending the Kansas Pacific Railway to the Pacific Ocean at San Francisco and San Diego. By Gen. Wm. J. Palmer, Manager of Surveys, St. Louis, Mo. Those interested in the subject will find this an exhaustive report on the subject.

HINTS FOR THE HUSBANDMAN.—From H. Bowers, of Philadelphia, we have received this pamphlet, treating of subjects interesting to agriculturists.

THE CINCINNATI LANCET AND OBSERVER.—An old medical journal, devoted to the interest of the profession. Edited by E. B. Stevens, M. D. \$3 per annum.

From Hon. J. A. Garfield, M. C., the **FLORA OF ALASKA**, by J. T. Rothrock, M. D., reported for the Smithsonian Institute.

THE OLD OAKEN BUCKET.—A literary and temperance magazine, published by Cowen & Protzman, Indianapolis, Ind., at \$2 a year.

THE STATESMAN.—We would again call attention to this able and highly interesting weekly, published every Saturday in this city. It is Democratic in its proclivities, and may be relied on for short and strong articles upon all subjects discussed. It is conducted with marked ability, compassing great variety in all departments, and is evidently conducted by gentlemen of taste and experience. Terms \$3 per annum. Address "The Statesman," 162 Baltimore street, Baltimore, Md.

THE EDINBURGH REVIEW—WESTMINSTER REVIEW—BLACKWOOD'S MAGAZINE.—These have been received from the Leonard Scott Publishing Co., N. Y., being the first quarter in the new year. Terms, \$4 for Blackwood or any of the Reviews; Blackwood or any one Review \$7; the four Reviews \$12; Blackwood and four Reviews \$15.

AMERICAN AGRICULTURIST.—This excellent monthly, published by Orange Judd & Co., New York, commends itself to every farmer and gardener in the country. It is the *ne plus ultra* in agricultural literature. The price only \$1.50—numerously embellished and beautiful in typography.

From Wm. H. Lyman, Leverett, Mass., his Illustrated Floral Guide and Catalogue of Seeds and Plants for 1869. This is a very complete catalogue, and numerous illustrations with the rarest flowers, &c.

From John Saul, of Washington, D. C., his Descriptive Catalogue of New, Rare and Beautiful Plants for Spring of 1869.

From Thos. Jackson, New York, his wholesale price list of Small Native Evergreens and Deciduous Trees for Spring of 1869.

A correspondent of the *Journal of Agriculture* has found that eight bushels of salt and one of plaster will cause an acre of clay loam to produce more than an equally expensive application of barnyard manure.

The spirit of the press—New cider.



Thos. B. McConaughy's Patent Corn Dropper.

This Dropper will positively save one-half the time over the old way of dropping corn.

It will drop it right in the cross.

It can be set to average any number of grains desired to a hill.

It can be regulated to scatter the corn more or less in the hill, or drop it all in close bunch if desired. In windy weather this Dropper is just the thing needed, as the corn cannot be blown about while dropping.

All who have used these Droppers agree in the opinion that the corn comes up more regularly after them, and there is less re-planting to do, because they drop a more regular number of grains to a hill, and every grain is sure to be in the cross, where they are covered alike.

Potash as a Fertilizer.

Potash forms one of the most essential constituents of a fertile soil, and one of the most important of all the fertilizing agents within reach of the agriculturist. In many plants it constitutes more than one-half of their ash, and in most at least one-third. In neutralizing acids in the soil and in the liberation of ammonia, it acts in the same manner as lime, but when it is desired simply to effect these last mentioned objects, the latter should be used, as being cheaper, and potash, generally available in the form of ashes, should be applied as a manure, using the word in its strictest sense, to indicate a substance that contributes directly to building up the structure of the plants. But considerable care should be exercised in the use of ashes, and they should never, as is the practice with some in manuring corn in the hill, be mixed with guano or the refuse of the hen roost, inasmuch as the first rain that dissolves them will cause the potash to displace the ammonia in the same manner that lime displaces it from barn-yard manure and similar manures, as we have just mentioned; and, although the potash of the ashes and the phosphoric acid of the guano, or the like, would be left to benefit the plant, the ammonia would be dissipated and lost, and the value of the fertilizer depreciated. Analogous to potash in this action is soda, which, however, with a few exceptions to the rule, enters but slightly into the composition of plants, and may generally be replaced, to a great extent, with potash. Turnips and Mangold Wurtzel, however, require a comparatively large amount of soda, the ash of the former containing upward of twenty-eight per cent. and the latter a nearly equal amount. This may be most conveniently applied to the soil when required in the form of common salt.—*J. A. Whitney, at N. Y. Farmers' Club.*

HOW I MAKE BUTTER:

A writer in the *Rural American* gives his method of making butter, and although it is intended to be packed for transportation it is none the less applicable for pound butter intended for home marketing:

I may as well say, I have been working in a dairy for nearly three-score years; fifteen years of that time in Orange co., N. Y., and 12 in Wisconsin.

My mode of making butter is this:—Have pails, pans, churn, tray, and ladle well washed, scalded and dried before using them. Set the milk in a temperature where it will get thick in from 30 to 40 hours, then either churn the milk, or take the cream off and churn it. Milk should never be permitted to stand until it begins to whey, as that will impair both quantity and quality. If cream or milk is too cold, put into the churn warm water; if too warm, put in cold water.

When the butter is properly gathered, put it in a tray, and put on cold water, and work with ladle moderately. Pour off the water and continue the process until the water looks quite clear. Then salt with good Ashton salt, working it through the butter evenly and pressing out the water or milk. Set it in a cool place; let it stand 24 hours, and work again and pack.

We milk generally from 10 to 20 cows. In the winter we make just as nice butter as in summer.—We take two carrots, wash them clean, scrape off the skin, grate them and pour on a half-pint of cold water; let stand a few minutes, and pour into a thin cloth, and squeeze into the cream before churning. This is for fifteen pounds of butter.

My cows are kept in a warm stable, and fed about a peck of coarse shorts per cow per day. I put 60 pounds of shorts in a tight box; pour on four pails of boiling water; let stand a short time, if convenient, and then add six pails of cold water, when I mix and feed. I consider this as good as twice the quantity fed dry.

Premium Butter.

At the Fair of the Orleans county (Vt.) Agricultural Society, George B. Brewster, of Irasburg, was awarded the first premium on a tub of butter, and submitted the following statement:

"I keep twenty-three cows of the native stock, with a slight mixture of Durham; their feed was the fall feed in my mow fields, with pumpkins in the morning; the cream was gathered in three days from milk that set thirty-six hours after milking; the cream then set twenty-four hours, then was churned; when the butter came it was put in a wooden bowl and washed with spring water until the milk was all washed out, and the water ceased to be colored, and remained clear; then the Ashton salt is worked in by hand at the rate of one ounce to a pound of butter; the butter is then set away to stand twenty-four hours; then it is worked over by hand, taking a small quantity at a time, and working out all the brine; then it is pounded down in the tub; the tub is filled within a half inch of the top; then it is covered with a cloth, over which is spread a thin layer of salt. This tub was packed the 4th of October. Cream is not churned the same day that it is skimmed, as it will sometimes have a peculiar taste, which it does not have after standing twenty hours. In the fall the pans are filled two-thirds full, and the cream rises as well, but in summer it should be more shallow."

BALTIMORE MARKETS---Mar. 29.

Prepared for the "MARYLAND FARMER" by JOHN MERRYMAN & CO., BALTIMORE.

[Unless when otherwise specified the prices are wholesale.]

BEEWAX.—Western 38 cts.; Southern 40 cts.

COFFEE.—Rio 14½@18½ cts., gold.

COTTON.—Low Middling 27¼@90 cts.; Middling, 28¼@92 cts.; Ordinary Upland 26 cts.; Good Ordinary 27 cts.

FEATHERS.—Common to mixed 40@50 cts. per lb.; fair to good 55@60 cts.; prime live geese, 80 cts.

FISH.—No. 1 Bay mackerel \$26@27½; No. 1 Shore \$22@23; No. 2 \$18@19; No. 3 \$13@14; medium \$12.00@13; Labrador herring \$8.50@9.50; gibbed \$5.50@6.50; Codfish \$5.50@7, per 100 lbs.

FLOUR—

Howard Street Super	.....	\$ 6.00 @	\$ 6.50
" " Shipping Extra	.....	6.75 @	7.50
" " High Grades	.....	7.75 @	8.75
" " Family	.....	9.00 @	10.00
Western Winter Super	.....	5.75 @	6.25
" " Shipping Extra	.....	6.50 @	7.50
" " Choice Extra	.....	7.25 @	7.75
" " Family	.....	8.50 @	9.00
Northwestern Super	.....	6.50 @	6.00
do Extra	.....	6.50 @	7.25
City Mills Super	.....	6.00 @	7.25
" " Standard Extra	.....	7.00 @	7.25
" " Shipping brands Extra	.....	8.25 @	8.75
Patapsco, Horicon, Reservoir and Wewerton	.....	
Family	.....	00.00 @	11.75
W. W. Legg's Family	.....	00.00 @	12.50
Union Mills Acme Family	.....	00.00 @	13.00
Greenfield Family	.....	00.00 @	13.00
James S. Welch's Family	.....	15.00 @	14.00
Baltimore High grade Extra	.....	00.00 @	10.25
Ashland Family	.....	00.00 @	11.75
Lingane	.....	00.00 @	11.75
Rye Flour	.....	6.75 @	7.25
Corn Meal—City Mills	.....	4.25 @	4.50
Buckwheat—New York	.....	4.00 @	4.25
" " Pennsylvania	.....	3.50 @	3.75

FERTILIZERS—

The Agent of the Peruvian Government having closed out the entire Stock at this Port, dealers are charging \$80@85 per 2000 lbs., as to quantity.

Turner's Excelsior	.....	70	¥ ton of 2000 lbs.
Turner's Ammo. S. Phos.	.....	55	¥ ton "
Coe's Ammo. S. Phos.	.....	55	¥ ton "
Soluble Pacific Guano	.....	60	¥ ton "
Redonda Guano	.....	30	¥ ton "
Flour of Bone	.....	60	¥ ton "
Andrew Coe's Super-phosphate	.....	60	¥ ton "
Baugh's Raw Bone S. Phos.	.....	56	¥ ton "
Baugh's Chicago Blood Manure	.....	50	¥ ton "
" " Bone Fertilizer	.....	46	¥ ton "
Grimes' Pat. Improved Fertilizer	.....	48	¥ ton "
Zell's Raw Bone Phosphate	.....	56	¥ ton "
Rhodes' do	.....	50	¥ ton "
Mapes' do	.....	60	¥ ton "
Bone Dust	.....	45	¥ ton "
Hornor's Bone Dust	.....	45	¥ ton "
Dissolved Bones	.....	60	¥ ton "
Baynes' Fertilizer	.....	40	¥ ton "
" " Fine Ground Bone	.....	45	¥ ton "
"A A" Mexican Guano	.....	33	¥ ton "
"A" do	.....	30	¥ ton "
Moro Phillips' Super-Phosphate	.....	56	¥ ton "
Berger & Burtz's S. Phos. of Lime	.....	56	¥ ton "
Md. Fertilizing & Manufacturing Co's Ammoniated Super-Phosphate	.....	50	¥ ton "
Fine Ground Bone Phosphates	.....	30	¥ ton "
Plaster	.....	\$2.25	¥ bbl.
Sulphuric acid, 3 cts. ¥ lb.—(Carboy 3.)	.....	
Nitrate of Soda (refined Saltpetre)	.....	6¼	¥ cts. per lb in kegs of 100 lbs.

GRAIN.—Wheat—Prime to choice red 2.00@2.20; common to good do. 1.90@2; Maryland white 2.00 @ 2.25.—Corn—Prime new white 80@87cts; damp 00@00 cts.; old white 00; new yellow 84@00. Oats—65@68 cts. weight.—Rye—\$1.50@1.55.

HAY AND STRAW.—Maryland Timothy baled \$20@22; Rye Straw \$17@18 per ton.

MILL FEED.—Brown Stuff 25 cts; Middlings 35@38 cts., per bushel.

MOLASSES.—Porto Rico, 65 cts; Cuba clayed 52@54 cts. E. Island 10@20 cts. New Orleans 70@80.

POTATOES.—Jerseys 85@90 cents per bushel; Eastern 95@\$1.

PROVISIONS.—Shoulders 13 cts.; Rib sides 17 cts.; clear rib 18 cts.

SALT.—Fine \$2 90@3.10, per sack; ground alum \$2.10@2.20; Turks Island 50@55 cts., per bushel.

SEED.—Clover \$10.00 Timothy \$3.75; Flax \$2.55.

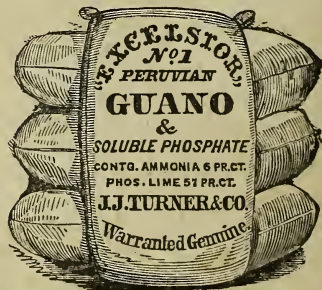
SUGAR.—Cuba 13@12¼; Porto Rico 12@12¼ Demarara 15¼@16¼ cts.

TOBACCO—

Maryland—frosted to common	.....	\$ 4.00 @	\$ 5.50
" " sound common	.....	6.00 @	7.00
" " good do	.....	7.00 @	8.00
" " middling	.....	8.50 @	10.50
" " good to fine brown	.....	11.00 @	15.00
" " fancy	.....	17.00 @	30.00
" " upper country	.....	7.00 @	35.00
" " ground leaves, new	.....	4.00 @	13.00
Ohio—Inferior to good common	.....	4.00 @	6.00
" " brown and greenish	.....	7.00 @	8.00
" " good and fine red and spangled	.....	00.00 @	00.00
" " medium and fine red	.....	9.00 @	18.00
" " common to medium spangled	.....	9.00 @	13.00
" " fine spangled	.....	15.00 @	20.00
" " fine yellow and fancy	.....	20.00 @	30.00
Kentucky—common to good lugs	.....	8.00 @	10.00
" " common to medium leaf	.....	11.00 @	14.00
" " good to fine	.....	15.00 @	18.00
" " select leaf	.....	20.00 @	25.00

WOOL.—Unwashed, 30@33 cts.; burry 25@27 cts.; tub washed 50@53 cts; pulled 33@38 cts.

WHISKEY.—94@95 cts.



CAUTION!

The popularity of "EXCELSIOR" as the only reliable substitute for Peruvian Guano, has induced unscrupulous parties in this and other cities to use the name "EXCELSIOR" to sell their worthless compounds. Every Bag of Genuine "EXCELSIOR" has our name on it in RED LETTERS. All others are counterfeits.

J. J. TURNER & CO.,

42 Pratt Street,
Baltimore, Md.

See advertisement of "Excelsior" on another page.

HOUSEKEEPERS!
HOUSEKEEPERS!
Men—Women—and Children!
Men—Women—and Children!

READ—READ.

"Cooling to Scalds and Burns,"
"Soothing to all painful wounds, &c."
"Healing to all Sores, Ulcers, &c."

'COSTAR'S' BUCKTHORN SALVE

Is the most extraordinary SALVE ever known. Its power of Soothing and Healing for all Cuts, Burns, Bruises, Sores, Ulcers, Chapped Hands and Skin, for Sore Nipples, for Piles, &c., &c.—is without a parallel. One person says of it, "I would not be without a Box in my House, if it cost \$5 00, or I had to travel all the way to New York for it."—[*N. Y. Evening News, Sept. 5.*]

All Druggists in Baltimore, Md., and Delaware sell it.

"That Cough will Kill you,"
Try "Costar's" Cough Remedy.
"Colds and Hoarseness lead to death,"
Try "Costar's" Cough Remedy.
"For Croup—Whooping Coughs, &c.,"
Try "Costar's" Cough Remedy.
"Costar says it is the best in the wide world—and if He says so—its True—its True—its True; and We say Try it—Try it—Try it."
[*Morning Paper, Aug. 26.*]

✂ All Druggists in Baltimore, Maryland, and Delaware sell it.

"COSTAR'S"
Standard Preparations
ARE HIS
BEAUTIFIER!

THE
BITTER-SWEET AND ORANGE BLOSSOMS.
One Bottle, \$1.00—Three for \$2.00.

HIS
BUCKTHORN SALVE!
HIS

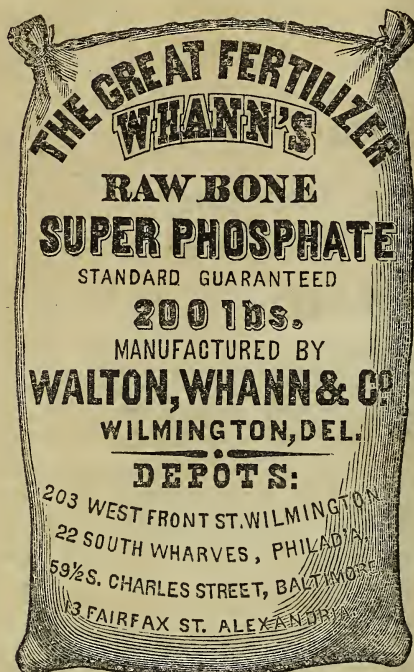
"Costar's" Rat, Roach, &c., Exterminators.
"Costar's" Bed Bug Exterminators.
"Costar's" (only pure) Insect Powder.
"Only Infallible Remedies known."
"18 years established in New York."
"2,000 Boxes and Flasks manufactured daily."
"!!! Beware!!! of spurious imitations."
"All Druggists in Baltimore sell them."

Address **"COSTAR," 10 Crosby St, N. Y.**

Or, JOHN F. HENRY (Successor to)

Demas Barnes & Co., 21 Park Row, N. Y.

Sold throughout Maryland, Del., and Va., by all best Druggists. ja-1y



**PROMPT
ACTIVE
RELIABLE**
A THOROUGH RENOVATOR
OF
EXHAUSTED SOILS
SEND FOR PAMPHLET
WALTON WHANN & CO.
WILMINGTON
DELAWARE.

Price in Baltimore of Whann's Raw Bone Super-Phosphate \$56 per ton.

Baltimore office, 59 1/2 SOUTH CHARLES STREET.

ap-6t

E. G. EDWARDS, Agent.

Important to Farmers!

THOS. B. McCONAUGHEY'S

PATENT CORN DROPPER



This Dropper will positively save one-half the time over the old way of dropping corn.

It will drop it right in the cross.

It can be set to average any number of grains desired to a hill.

It can be regulated to scatter the corn more or less in the hill, or drop it all in close bunch if desired. In windy weather this Dropper is just the thing needed, as the corn cannot be blown about while dropping.

All who have used these Droppers agree in the opinion that the corn comes up more regularly after them, and there is less re-planting to do, because they drop a more regular number of grains to a hill, and every grain is sure to be in the cross, where they are covered alike.

Every Dropper will be warranted to do all that is herein claimed for them, or they will be taken back and the money refunded.

This is to certify that we have sold 300 or more of McConaughey's Patent Corn Dropper to our customers of Middletown and vicinity, within three years past. They have given general satisfaction and are considered a valuable implement by the Farmers of this section.

JNO. A. REYNOLDS & SONS,
Merchants, Middletown, Del.

NEAR SUMMIT BRIDGE, DEL., }
March 13th, 1886.

This is to certify that I have used for several years McConaughey's Patent Corn Dropper, and I am convinced every Farmer would find it greatly to his interest to own one.

B. T. BIGGS.

MIDDLETOWN, March 15th, 1886.

Thos. B. McCONAUGHEY:—After three years' experience in dropping our corn with your Patent Corn Dropper, we have found their use to be a great saving to us over the old way of dropping, with better satisfaction in the manner in which they do their work, and we think we have had less replanting to do since we have been using them.

R. A. Cochran, Jr., Wm. Wilson,
J. F. Wilson, W. A. Cochran,
B. F. Hanson, W. Green.
R. R. Cochran,

This is to certify that we, the undersigned, having used Thos. B. McConaughey's Patent Corn Droppers, have found them, after trial, to be a valuable and labor-saving invention. We think Farmers will find it to their interest to use them.

Wm. Reybold, Geo. G. Kerr,
Wm. Knotts, R. D. Melvin,
C. Tatman, Jr., J. Stewart,
J. A. Reynolds, Jr., Geo. Derrickson,
W. R. Lockwood,
W. Plinthane, Wm. D. Cornog,
Merit Hubbell, T. B. Nivine,
Jas. Kanely, Jr., O. Crow,
Jos. T. Griffith, Wm. N. Wilson,
B. Gibbs, Sam'l Rambo,
N. T. Sevil, T. Murphy,
J. R. Hoffecker, Calvin Jones,
R. T. Cochran, Jno. C. Spear,
J. W. Crawford, Wm. S. Mote,
J. J. Lockwood, C. P. Cochran,
Thos. S. Merrett, E. F. Kanely,
S. W. Stewart, Jos. Griffith,
T. Carlisle,

Dealers in Agricultural Implements and Store Keepers will find it to their interest to keep a supply of these Droppers on hand for the trade.

Sample Droppers sent anywhere by Express for \$2 50 a piece.

Agents wanted in every county.

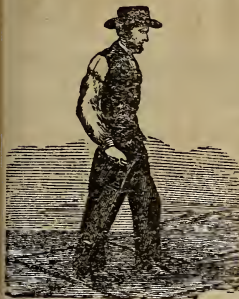
THOS. B. McCONAUGHEY,
Newark, Del.

ap-2t

WAKEFIELD'S

IMPROVED

HAND CORN PLANTER.



The subscriber having made the planting of corn by machinery, a special study for more than twenty years, is now enabled as the result of his experiments, to offer the farmer an implement greatly improved in principle and construction, which will plant in the best manner from eight to ten acres per day in the hands of any farm laborer of ordinary skill and intelligence, saving its cost over hand planting every five or six hours it is used. Full directions for using on each planter. More than one hundred thousand of these

implements have already been sold.

P. S. MESEROLE, Chicago, sole Agent for the State of Illinois, and all territory north and west. For all other sections the Planter may be had at wholesale and retail of E. H. Reeves & Co., New York; Wade & Armstrong, Philadelphia; E. Whitman & Sons, Baltimore; A. D. Smith, Cincinnati, of the manufacturer, and at retail of all Agricultural dealers.

Patented July 25th, 1854, and June 5th, 1863, and extended July 23d, 1868.

CHAS. A. WAKEFIELD, Pittsfield, Mass.,

Patentee and Sole Manufacturer.

ap-1t

To FARMERS---AGENTS WANTED.



THE PATENT PARTS of the celebrated Silver's Elastic Broom, Seamless Brass Cap, Ferrul, and Screw Loop, WHICH LAST A LIFETIME, sent to Farmers (where we have no Agents), with full instructions for making their own Brooms, by mail, (pre-paid,) for \$1.25. Best seed 15 cents extra.

The "American Agriculturist," O. Judd, Editor, says: "Silver's Brooms are adapted as a family institution."

ONE AGENT WANTED in every County. Exclusive right of sale given, and \$100 to \$200 per month paid, or a commission from which twice that amount can be made. MERCHANTS SUPPLIED WHERE WE HAVE NO AGENTS. Address C. A. CLEGG & CO., 38 Courtland St. N. Y.

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NOTICE!

Batesville, on the Columbia and Augusta Railroad, in South Carolina, is in want of one or more first-rate BLACKSMITHS and WHEEL-RIGHTS.

For particulars, address

A. D. BATES,

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\$32. TICK, TICK \$30.

AMERICAN WATCHES, worth \$32, given as premiums for \$30 worth of subscriptions for WOOD'S HOUSEHOLD ADVOCATE, a first class Family Paper, at 75 cents a year. Send for specimen copy. Address S. S. WOOD, P. O. Building, Newburgh, N. Y.

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R. T. BANKS,



By Volunteer, he by Rysdyk's Hambletonian, dam by Green Mountain Morgan, grand dam by Imported Bellfounder, will stand for 20 select and approved mares at the THREE TUNS STABLES, corner Paca and Pratt streets. Terms \$75; \$50 at time of service, and \$25 when the mare proves in foal.

A. F. FAWCETT, Owner.

AUGUSTUS LOVE Agent.

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1000 Agents to sell "ORA, THE LOST WIFE," by Mrs. Bella Z. Spencer, author of "Tried and True." This is the best selling Book now offered Agents.—It has been published but four days, and hundreds of orders are already reported.

One Agent reports twenty-three copies sold in one day. Another twenty-two, and still another fifteen. Everybody wants it. For full particulars, apply to or address,

W. J. HOLLAND & CO.

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Springfield, Mass.

500 Barrels Potatoes.

Consisting of Early Goodrich, Harrison, Cuzco and Carters. For sale at the Agricultural and Seed Warehouse of

JNO. M. GRIFFITH & CO.

1t 41 and 43 N. Paca Street, Baltimore, Md.

For Sale.



A Thorough-Bred ALDERNEY COW, with Heifer Calf, from Mr. W. C. Wilson's herd. Will be sold cheap, as the owner wishes to reduce his stock. Address

THOS. J. COCHRAN,

165 Hoffman street, Baltimore, Md.

Or call at his farm, near Govanstown, Md.

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Small Evergreens and Deciduous Trees.

200,000 ARBOR VITÆ,

Hedge size, Nursery grown. Catalogue mailed free. For sale from April 1st to June 1st, by

A. P. CHAPMAN,

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10,000 KITTATINNY

BLACKBERRY PLANTS,

For \$400. Address

GRANVILLE S. PERRY,

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Georgetown, Conn.

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\$3 WONDER.

INDUSTRY SEWING MACHINE,

Only **Three Dollars.** Simple, practical and durable.—
Makes the Elastic chain stitch, and adapted for all kinds of
plain sewing. Any child can operate it. An elegant Gift.
Testimonials daily. Sent in perfect order on receipt of
price, \$3. Address **Industry Sewing Machine Co.,**
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100 Beautiful Photographs sent on receipt of
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For Marking Clothing, &c.

Single, 50c.; 3 for \$1; per doz. \$2 75; per grs., \$28.

Sent, freight paid, on receipt of price.

More convenient than ink.—*Am. Agriculturist.*

Invaluable to the housekeeper.—*Godey's Lady's Book.*

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SOLD by Stationers and Dealers everywhere.

PREMIUM CHESTER WHITE PIGS.

All persons wishing to procure the

Genuine Chester White Pigs

can obtain them of us the coming spring. Our stock is as
pure as can be had in the United States, and possess more
desirable qualities than any other known breed. Have
gained 11½ ounces of live flesh for each pound of corn con-
sumed. Send for our circular. Address,

JAMES YOUNG, JR. & CO.,
Marshallton, Chester County, Pa.

GET THE BEST!—Prices Reduced!—100,000
Kittatinny Blackberry, Philadelphia and Clarke Rasp-
berries, all grown from the original stock. The Fruit sold
for \$16 per bushel. Send for Catalogues. **WM. PARRY,**
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For Copying Letters Without Press or Water.

This Great Time, Labor and Money-Saving Invention
brings a really indispensable feature of business within the
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None see it but to praise its simplicity and convenience,
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every kind of business. It does not play out, as the first sale
is only a beginning. Exclusive territory given. For tes-
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TO THE WORKING CLASS:—I am now prepared to furnish
all classes with constant employment at their homes, the
whole of the time, or for the spare moments. Business
new, light and profitable. Fifty cents to \$5 per evening,
is easily earned by persons of either sex, and the boys and
girls earn nearly as much as men. Great inducements are
offered those who will devote their whole time to the busi-
ness; and, that every person who sees this notice, may
send me their address and test the business for themselves,
I make the following unparalleled offer: To all whom are
not well satisfied with the business, I will send \$1 to pay
for the trouble of writing me. Full particulars, directions,
&c., sent free. Sample sent by mail for 10 cts. Address
E. C. ALLEN, Augusta, Me.

\$25 A DAY.—Money Free as Water. Send 2 stamps.
HILTON & CO., 859 3d ave., N. Y.

New Seedling Potatoes.

THREE NEW KINDS of great excellence, NOT TO BE
FOUND IN ANY OTHER CATALOGUE, will be found engraved
and fully described in my new Seed Catalogue. Sent
Gratis to all.

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Guaranteed Perfectly Pure.

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STANDARD FRUIT TREES, for Orchards.

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GRAPE VINES—Old and new varieties.

STRAWBERRIES, and other small fruits; best new and
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FLOWERING SHRUBS and Plants.

ROSES, PAEONIES, DAHLIAS, etc., superb collections.

GREEN-HOUSE and BEDDING PLANTS.

Our general stock is the largest and most complete in
the country. Prompt and careful attention given to every
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No. 1. Descriptive Catalogue of fruit, 10c.

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Mount Hope Nurseries,

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Roofing, Siding, Ceiling,
Carpeting, Water Pipes,
Eave Gutters, &c. Address
C. J. FAY & SONS, Camden, New Jersey.

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CAHOON'S
BROADCAST SEED SOWER,

For Sowing all kinds of Grain and
Grass Seeds.

See Cut and Description in reading columns.

For sale by

E. WHITMAN & SONS,

mar-1f 22 and 24 S. Calvert st., Balto., Md.

ANDREW COE'S SUPER-PHOSPHATE OF LIME.

A Standard Manure for all Field and Garden Crops. It matures the Crop much earlier, and greatly increases the yield.

Lands exhausted by long cultivation are made productive by the use of this Super-Phosphate. It supplies to the soil those substances that are taken out by cropping. It is in fact PLANT FOOD, and when it is used, the land continues to improve each year, and to require a less quantity to produce the same amount of results.

It gives WHEAT a firmer stalk, so that it is not liable to lodge before ripening, and produces a large head and plump kernel. RYE, BARLEY or OATS are equally benefited.

It gives CORN and PEAS a dark green color, and a vigorous growth, and causes them to ripen much earlier.

Its effect on POTATOES is especially marked in the increased yield.

It quickens the growth of TURNIPS, and the increase of yield is remarkable. The same is true with CARROTS, BEETS, and other root crops.

To TOBACCO the Phosphate gives a vigorous growth, and a large well developed leaf.

It gives to COTTON a rapid growth and increased fruitage, the bolls continuing to come forward and ripen until destroyed by the frost.

It improves the quality of the fruit of GRAPE VINES and FRUIT TREES; also of STRAWBERRIES and other small fruits.

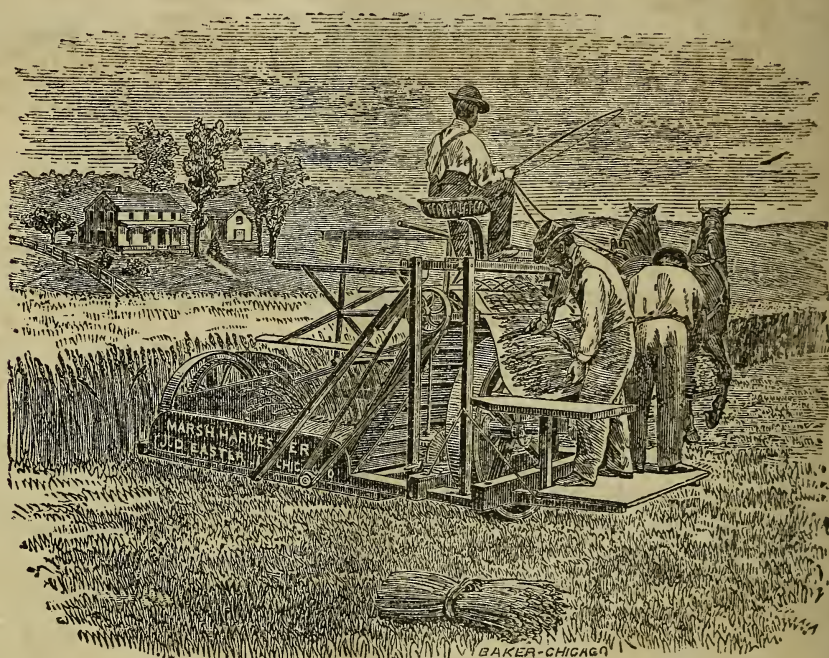
Its effect upon FLOWERS and upon LAWNS surpass that of any other fertilizer.

Price \$60 per ton of 2000 lbs.

Manufactured and for sale by

E. WHITMAN & SONS,
22 and 24 South Calvert Street,

THE MARSH HARVESTER!



SAVES LABOR!

SAVES MONEY!

SAVES GRAIN!

POINT FIRST.—It saves half the cost of harvesting, two men doing the work of four

POINT SECOND.—It saves all the grain, not a straw touches the ground till bound.

POINT THIRD.—It is a simple machine, has only half as much gearing as an ordinary reaper.

POINT FOURTH.—It is light running. You probably will not believe this until you see it run. You certainly will then. The reason it runs so light, is, the wheels are large, there is so little gearing, and the weight is evenly divided on the main wheel.

POINT FIFTH.—There is no side draft.

POINT SIXTH.—You can turn it round as easy as a cart or sulky. Try it and see if this is not true.

POINT SEVENTH.—It is the best machine for lodged and tangled grain, because the grain is straightened somewhat in elevating to the concave, and the binders can get it in much better shape for binding, than they could if thrown on the ground.


Manufactured by EMERSON & CO., Rockford, Illinois.

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Office of "Maryland Farmer,"

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 Circulars sent free when requested,

THE DOCTOR AND THE CLOTHES WASHER, AND THE UNIVERSAL WRINGER

PAY FOR THEMSELVES TWICE A YEAR by Saving LABOR and CLOTHES.

"Worth \$1 a Week in any Family."—*N. Y. Tribune.*

R. C. BROWNING, General Agent, No. 32 Cortlandt-st., New-York City.

SOLD BY DEALERS EVERYWHERE.

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OIL VITRIOL,

SULPHURIC ACID,
SULPHATE OF SODA
AND AMMONIA,
AND GROUND BONES,

FOR AGRICULTURAL PURPOSES.

POWERS & WEIGHTMAN'S MANUFACTURE in large or small quantities.
For sale at manufacturers' prices by

R. J. BAKER & CO.,

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36 and 38 South Charles street, Baltimore, Md.

MORO PHILLIPS'

GENUINE IMPROVED

SUPER-PHOSPHATE OF LIME

STANDARD GUARANTEED.

For sale at the Manufacturer's Depots,

No. 27 Front Street, Philadelphia,

AND 95 SOUTH STREET, BALTIMORE,

And by Dealers in general throughout the country.

The SOMBRERO GUANO of which MORO PHILLIPS' PHOSPHATE is and always has been manufactured, (and of which he has sole control for the United States,) contains fifty per cent. more Bone Phosphate than Raw Bone, therefore it is more durable. The addition of Ammonia gives it greater fertilizing value.

Over eight years' experience has proved to the farmer that it makes a heavier grain than even stable manure, and is not only active, but lasting.

Price \$56 Per Ton---2,000 Pounds. Discount to Dealers.

MORO PHILLIPS,

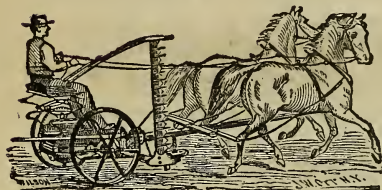
Sole Proprietor and Manufacturer.

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E. WHITMAN & SONS,

22 and 24 S. Calvert Street,

BALTIMORE, MD.



AGENTS

FOR

THE



“EXCELSIOR”

Self-Raking or Dropping

REAPER and MOWER

MANUFACTURED BY THE

J. F. Seiberling Company,

AKRON, OHIO.

The Excelsior is no longer an untried experiment; but, on the contrary, it is a successful reality, having now been before the public eight harvests, and having passed triumphantly through the severest tests on all kinds of land; up hill and down hill; through mud and mire; over stones, stumps and ditches; wet and dry; cutting through tangled and lodged grain and grass, and still doing its work equally well in all situations and conditions, until it is now acknowledged by all, both friends and adversaries, to have more good points than any other Reaper and Mower now known, and well worthy of its exalted name—EXCELSIOR—as it does in reality excel all others; being light, yet strong and durable; simple, without the least complication; the driver performing the whole—the driving and dropping off the grain—with as much ease as driving alone; throwing or dropping off the grain at pleasure, by a treadle under his foot, which delivers the grain in better condition to bind than a hand-raker can possibly rake it off, and when dropped, it lets the grain lay on the stubble just as it laid on the slatted platform of the machine.

PRICES:

Large Combined Machine,	. . . . .	\$185 00
Junior “ “	. . . . .	170 00
Large Mower,	. . . . .	140 00
Junior “ “	. . . . .	125 00

Freight from Factory added to the above prices.

We would advise all who may desire to procure one of these most excellent machines to make early application, as the demand has been largely in excess of the supply for several past seasons.

Descriptive catalogues and circulars sent on application. Address

E. WHITMAN & SONS,



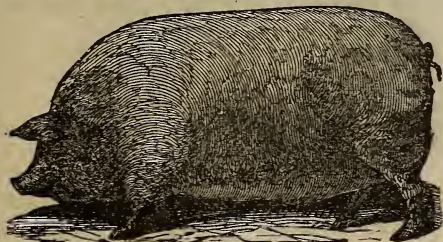
SMITH'S PATENT WELL-FIXTURE.

This device for raising water was patented in 1859, and an important improvement patented in 1868.

Its superiority over all other well-fixtures is attested by **FOUR FIRST PREMIUMS** awarded it at Agricultural Fairs in 1868. At Staunton and Lexington this premium was awarded over Well-fixtures, which had taken the first premium at several Northern Fairs where we did not compete. No pumps of any kind can be sold in districts where our Well-fixture is properly known. Over **SEVEN THOUSAND** are in use, and the demand is constantly increasing. A liberal discount for large orders from dealers.

H. M. SMITH & CO., Manufacturers,
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PREMIUM CHESTER WHITE PIGS.



Bred and For Sale by

GEO. B. HICKMAN,
WEST CHESTER, CHESTER Co., PENN.

Send for a Circular and Price List. feb-3t

GIANT WAX BEANS, (Pole.)

Pods 6-9 inches long, pale waxy yellow, stringless and very fleshy and tender, even when full grown. Of excellent quality, and remarkable productiveness. One of the most valuable varieties for amateur or market culture.

Price of Seed, (by mail, postage paid,) 25 cents per packet.

feb-3t

EDWD. J. EVANS & CO.,
York, Pa.

VALUABLE FIELD SEEDS

NEW BRUNSWICK OATS.—A very handsome White Oats, with a large, plump, heavy grain, weighing (in favorable seasons) 45 pounds per bushel, and yielding abundantly—\$1 per peck, \$3 per bushel.

IMPROVED PENNSYLVANIA GOURD SEED CORN.—Exceedingly productive and valuable—\$1 per peck, \$3 per bushel.

EARLY WHITE MARROW BEANS.—One of the most valuable varieties for field culture, \$2 per peck, \$7 per bushel.

POTATOES.

EARLY GOODRICH.—Very valuable for early market culture, \$2 per bushel, \$5 per barrel.

HARISON.—The best late market Potato; enormously productive—\$2 50 per bushel, \$7 per barrel.

EARLY ROSE.—Exceedingly early and of superior quality; of the highest promise—\$5 per peck, \$15 per bushel.

VANDERVEER'S SEEDLING.—Large and very productive; new—\$1.50 per peck, \$5 per bushel.

Also a full assortment of Fresh Garden Seeds, including all the most valuable **NOVELTIES.**

EDWD. J. EVANS & CO.

feb-3t

York, Pa.

BOWER'S COMPLETE MANURE,

MANUFACTURED BY

HENRY BOWER, Chemist,
PHILADELPHIA.

MADE FROM

Super-Phosphate of Lime, Ammonia and Potash.

WARRANTED FREE FROM ADULTERATION.

This Manure contains all the elements to produce large crops of all kinds, and is highly recommended by all who used it, also by distinguished chemists who have, by analysis, tested its qualities.

Packed in Bags of 200 lbs. each.

DIXON, SHARPLESS & CO.,

AGENTS,

39 South Water & 40 South Delaware Avenue,
PHILADELPHIA.

FOR SALE BY

WILLIAM REYNOLDS,

79 SOUTH STREET, BALTIMORE, MD.

And by dealers generally throughout the country. For information, address Henry Bower, Philadelphia.
feb-1y

All communications for the MARYLAND FARMER, will be addressed to S. S. MILLS & CO., No. 24 S. CALVERT STREET, BALTIMORE, MD.

ALWAYS TRIUMPHANT.

—:O:—

**WALTER A. WOOD'S
PRIZE**

MOWERS & REAPERS

Used in all Countries, and universally commended as **THE BEST IN USE !**



Awarded **MORE FIRST PREMIUMS** than any other Machine manufactured, both in this and Foreign Countries, among which is **THE HIGHEST PRIZE—Two Grand Gold Medals and Cross of the Legion of Honor—AT PARIS EXPOSITION, 1867.**

More than 120,000 now in use. 20,000 manufactured and sold in 1868, and the demand unsupplied.

INCREASING DEMAND !

INCREASED FACILITIES !

ADDITIONAL IMPROVEMENTS for 1869 !

Wood's Prize Mowers, (one and two horse) ; Wood's Self-Raking Reaper with Wood's New Mowing Attachment ; Wood's Hand Rake Reaper, and Haines' Illinois Harvester. Manufactured by the Walter A. Wood Mowing and Reaping Machine Company. General Office and Manufactory **HOOSICK FALLS, RENSSELAER CO., N. Y.**

BRANCH OFFICE AND SALESROOM { **44 Courtland Street, N. Y. City, P. O. Box 5805.**
Alexandria, Va.

Send for New Descriptive Circular and Price List. Applications from the South, south of Virginia, should be addressed to the New York Branch Office, as above,
Reliable agents wanted. Extra inducements offered !


FOR COTTON, TOBACCO & OTHER SPRING CROPS OF 1869!

BAUGH'S
RAW BONE PHOSPHATE,

Containing 53 per cent. Phosphate of Lime (of which nearly 15 per cent. is soluble), and 5 per cent. of Ammonia.

Many years experience on the varied crops and lands of the South has demonstrated the use of this Fertilizer to be indispensable in the growth of large crops of Cotton, Tobacco and all Cereals and Garden Vegetables, as well as in permanently enriching the soil.

Price in Baltimore \$56 Per Ton.

 Sold by Dealers generally.

GEORGE DUGDALE, Manufacturer's Agent.

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97 and 105 SMITH'S WHARF, BALTIMORE, MD.

WM. H. LYMAN,
IMPORTER AND GROWER OF
SEEDS, BULBS AND PLANTS,

Has the pleasure of offering to his Southern friends and the public generally


His Illustrated Floral Guide and Catalogue of Seeds, Plants, &c., for 1869,


Which contains descriptions of 1600 varieties of SEEDS AND PLANTS. It is splendidly illustrated with a large number of elegant wood engravings, and two beautiful colored plates, one of which is the celebrated "*MRS. POLLOCK GERANIUM*."

In it will be found designs for arranging the Flower Garden, together with full directions for sowing seeds, transplanting, &c. This work is sent free to all my customers, and to all others on receipt of ten cents, which is not one-half the actual cost. Every one should have a copy. One lady says, "I should not be without it if it cost a dollar, for I know of no work which I could obtain that gives so much reading matter for less than fifty cents, saying nothing about the beautiful engravings."

I am also introducing my new TOMATO, the

LYMAN MAMMOTH CLUSTER.


This Tomato is a cross between a French unknown variety and the Lester's Perfected, retaining the smoothness and solidity of the latter, growing in clusters; each stem bearing from six to twelve tomatoes. It is perfectly smooth and nearly round, about the size of a Baldwin apple; color of a rosy pink, and keeps well; solid, has but few seeds, and is no doubt one of the best early varieties we have. It is unexcelled for eating raw, and is delicious for cooking, being very high flavored. In earliness it excels the "Keyes Tomato," and ripens its fruit evenly, about TEN DAYS before the Early Red.  Undoubtedly the best market variety of Tomato in existence.

I shall retail the seed of this Tomato in packets, at 25 cents per package.  For Illustrated circular, containing description, recommendation, &c., address, enclosing two cent stamp,

WM. H. LYMAN,

Seedsman and Florist, Leverett, Massachusetts.

feb-4t

 Publishers wishing to insert the above advertisement may address as above, stating terms, &c.

WHEELER & WILSON'S



FAMILY SEWING MACHINE.

The most Simple, Durable, Cheapest, Economical and Popular!

Its sales are 100,000 more than the next largest Company, whose Machine is fully three years older.—
Sales as per sworn reports up to September 10th, 1867.

WHEELER & WILSON.....	300,000	SINGER.....	202,000
GROVER & BAKER.....	165,000	FLORENCE.....	35,000

Awarded the Highest Premium at the Paris Exposition, all the machines of the world in competition.

Every one may be the possessor of one of these unrivalled Machines, as we endeavor to make the terms of sale suit all customers. *Call at our Salerooms, or enquire of our Agents, and look at the Machines, and be sure and ask the terms of sale.*

PETERSON & CARPENTER, General Agents,

mar-ly

214 W. BALTIMORE STREET, BALTIMORE, MD.

ZELL'S

AMMONIATED

Bone Superphosphate,

For Cotton, Tobacco, Corn, Oats,

Wheat, Rye, Potatoes, Turnips, Cabbage, Grass, &c.

Permanently improves the Soil. Quick and active as Peruvian Guano.

For this Valuable Fertilizer, we only ask a Trial side by side with any in the market to attest its superiority.

P. ZELL & SONS,

89 SOUTH STREET, BALTIMORE, MD.

NOTICE.—For top-dressing Wheat it has no superior.

Price \$60 per ton, in Bags or Barrels.

For sale by Agents and Dealers throughout the Country.

mar-3m

BERGER & BUTZ'S
Excelsior Superphosphate of Lime



This valuable Fertilizer took the First Premium at the Agricultural Fairs held at Danville and Staunton, Virginia, in October, 1868, and may be relied upon as the best and cheapest fertilizer for Cotton, Tobacco, Corn, Oats, Wheat, Vegetables, &c.

R. J. RUTH & CO., General Agents,
jan-1y 16 Bowly's Wharf, Baltimore, Md.

175 ACRES
Planted with Small Fruits.
—
100 Acres Planted with
WILSON EARLY BLACKBERRY.

A good, large stock of PLANTS of the leading varieties of

BLACKBERRIES, RASPBERRIES,
Strawberries, Currants, Grapes.

ALSO,
ASPARAGUS ROOTS,
Early Rose Potatoes,

&c. &c. &c.

ROOT CUTTINGS by the dozen, hundred, thousand, or million.

Correspondence solicited.

JOHN S. COLLINS,
oct-6t Moorestown, N. J.

300,000 PEACH TREES
AT REDUCED PRICES!

Trees all budded and stock grown from natural pits; Trees fine and free from disease. Will be sold low to clear the ground.

Large stock of Apples, Pears, Plums, Cherries, Apricots and Nectarines; Raspberries and Blackberries; Strawberries, Gooseberries and Currants; Grapes, Quinces and Rhubarb; Asparagus, Ornamental Trees, Roses and Shrubbery; Hot House Plants, &c. Send stamp for catalogue.

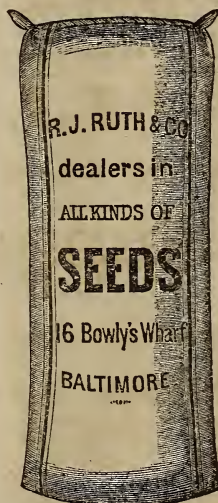
Orders by mail will receive prompt attention.

GREAT NORTHERN & SOUTHERN NURSERIES,
Wilmington, Delaware.
feb-3t **RANDOLPH PETERS.**

Sorgo Machinery
FOR SALE CHEAP.

A complete set of SORGO MACHINERY, consisting of one No. 5 VICTOR MILL (used one season,) one COPPER EVAPORATOR (16 feet long) as good as new, and the necessary fixtures, comprising a full set, which cost \$600, and the whole can be bought for \$300. Apply at office of the

feb-tf "MARYLAND FARMER,"
24 S. Calvert st., Baltimore.



CLOVER,
TIMOTHY,
KENTUCKY
Blue Grass,
Red Top
And all other
SEEDS.

Our SEEDS are new, free from weeds, and may be relied upon as the best in the market.

R. J. RUTH & CO.
COMMISSION MERCHANTS,
jan-1y 16 Bowly's Wharf, Balto., Md.

FOUTZ'S CELEBRATED Horse and Cattle Powders.



This preparation, long and favorably known, will thoroughly re-invigorate broken down and low-spirited horses, by strengthening and cleansing the stomach and intestines.

It is a sure preventive of all diseases incident to this animal, such as LUNG FEVER, GLANDERS, YELLOW WATER, HEAVES, COUGHS, DISTEMPERS, FEVERS, FOUNDER, LOSS OF APPETITE AND VITAL ENERGY, &c. Its use improves the wind, increases the appetite—gives a smooth and glossy skin—and transforms the miserable skeleton into a fine-looking and spirited horse.



To keepers of Cows this preparation is invaluable. It is a sure preventive against Rinderpest, Hollow Horn, etc. It has been proven by actual experiment to increase the quantity of milk and cream twenty per cent. and make the butter firm and sweet. In fattening cattle, it gives them an appetite, loosens their hide, and makes them thrive much faster.

In all diseases of Swine, such as Coughs, Ulcers in the Lungs, Liver, &c., this article acts as a specific. By putting from one-half a paper to a paper in a barrel of swill the above diseases will be eradicated or entirely prevented. If given in time, a certain preventive and cure for the Hog Cholera.



**DAVID E. FOUTZ, Proprietor,
BALTIMORE, Md.**

For sale by Druggists and Storekeepers throughout the United States, Canadas and South America.

FOUTZ'S MIXTURE, The Great External Remedy, For Man and Beast. IT WILL CURE RHEUMATISM

The reputation of this preparation is so well established, that little need be said in this connection.



On MAN it has never failed to cure PAINFUL NERVOUS AFFECTIONS, CONTRACTING MUSCLES, STIFFNESS AND PAINS IN THE JOINTS, STITCHES IN THE SIDE or Back, SPRAINS, BRUISES, BURNS, SWELLINGS, CORNS and FROSTED FEET. Person affected with Rheumatism can be effectually and permanently cured by using this wonderful preparation; it penetrates to the nerve and bone immediately on being applied.



On HORSES it will cure SCRATCHES, SWEENEY POLL-EVIL, FISTULA, OLD RUNNING SORES, SADDLE or COLLAR GALLS, SPRAINED JOINTS, STIFFNESS OF THE STIFLES, &c. It will prevent HOLLOW-HORN and WEAK BACK IN MILCH COWS.

I have met with great success in bringing my Mixture within the reach of the Public. I am daily in receipt of letters from Physicians, Druggists, Merchants and Farmers, testifying to its curative powers.

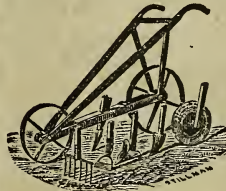
**DAVID E. FOUTZ, Sole Proprietor,
BALTIMORE, Md.**

feb-ly

IRON AND WIRE FENCES.

Iron Ox Hurdle Fence, Iron Sheep Hurdle Fence, Wire Webbing for Sheep and Poultry Yards, Iron Farm Gates, Guards for Stable Divisions, Store Fronts, Factories, &c., Tree Guards, ORNAMENTAL WIRE WORK for Porches, Green Houses, &c.; WIRE RAILING for Cottage, Garden and Cemetery enclosures; Mosquito Netting and every variety of WIRE WORK. Every information furnished by manufacturers.

M. WALKER & SONS,
feb-ly No. 11 N. 6th street, Philadelphia, Pa.



**Crawford's
HAND
Garden Cultivator**

A new and valuable
Horticultural Machine.

Warranted to save the Labor of four to six Men.

Pure Cane Seed.

REGULAR SORGO and LIBERIAN, by Mail, 40 cents per pound; by Express, 25 pounds or less, 25 cents per pound; over 25 pounds, 15 cents per pound.

NEEZANA, by Mail, 40 cents per pound; by Express, 25 pounds and less, 30 cents per pound; over 25 pounds, 20 cents per pound.

Send for circular.

BLMYER, NORTON & CO.

mar 2t

116 Main Street. Cincinnati, O.

EGGS FOR HATCHING.

From Crevecour, Houdan, Black Java, Buff Cochins, White Face Black Spanish, Brahmas, Silver Spangled Hamburgs, Dominiques, Earl Derby Games, Cuban Games. Rouen, Aylesbury, Cayuga and Muscovy Ducks.

My breeding stock are second to none in the country.

Send stamp for descriptive circular and life portraits.

C. P. NETTLETON,

ang-ly

Birmingham, Connecticut.

CATALOGUES FREE!

M. O'KEEFE, SON & CO.'S

Catalogue of Seeds,

AND GUIDE TO THE

FLOWER and VEGETABLE

GARDEN FOR 1869.

Published in January. Every lover of flowers wishing this new work, free of charge, should address immediately M. O'KEEFE, SON & CO., Ellwanger & Barry's Block, Rochester, N. Y. nov-7t

RHODES' STANDARD MANURES!

RHODES' SUPERPHOSPHATE.

The Old and Longest Established Standard Manure.

Used and approved by the most successful crop growers, and preferred by many to PERUVIAN GUANO. PRICE \$50 PER TON, in Bags or Barrels.

Rhodes' Tobacco Manure.

Prepared with special reference to the growth of this important staple. PRICE \$55 PER TON, in Bags or Barrels.

RHODES' POTATO MANURE.

BAGS or BARRELS. PRICE \$60 PER TON.

ORCHILLA GUANO.

A. A.

A Fine Bird Guano. Rich in Phosphate and Alkaline Salts. PRICE \$30 PER TON.

No. 1 PERUVIAN GUANO at lowest market prices.

Farmers and Dealers apply to

B. M. RHODES & CO.

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82 SOUTH STREET, Below Corn Exchange, Baltimore.

LEACHED ASHES!

LEACHED ASHES!!

5000 to 10,000 Bushels Leached Ashes, for sale by

JAMES WEBB,

Soap and Candle Factory,

Corner Chew and Ensor Streets,

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Baltimore, Md.

TREE SEEDS.

Over 100 kinds, including Apple, at \$12 per bushel, Pear, Cherry, Plum, &c., with latest hints on raising.

HEDGE PLANTS—Finest stock of *Osage Orange* in the East, \$3.50 by the 100,000; \$5 per single thousand, and arrangements special for those who sell again.

NURSERY STOCK—Suited to distant transportation. Near 200 items, including Fruit Stocks, Evergreens, &c.

GOODRICH POTATOES—The best Early \$4.50 per barrel.

Send for lists.

feb-3t

THOMAS MEEHAN,
Germantown, Pa.

ORNAMENTAL AND USEFUL.

BUY ONLY

SILVER TIPPED SHOES

For Children. Will outwear three pairs without tips.

feb-3t

Notice to Farmers, Dairymen and Horsemen!

BREWING, FRONEFIELD & CO'S

VEGETABLE CATTLE POWDER.

FIRST INTRODUCED IN 1848.

This preparation contains the latest and most approved remedies for all diseases to which Horses, Cattle and Swine are incident. Either as a preventive or as a cure in the early stages of the dreaded disease of Pleuro-Pneumonia or Rinderpest, now making fearful inroads among our Cattle. This POWDER has already achieved reasonable reputation. It is compounded on strictly chemical principles; contains the elements to form healthy blood and generate animal heat, and is warranted to make an increase of at least 25 per cent. in the animal product, either as fat or as milk and butter, upon the same amount of food.

Prepared by

FRED. A. MILLER, Sole Agent,

No. 125 North 4th Street, Philadelphia, Pa.

N. B.—Do not fail to send for a pamphlet giving full particulars.

feb-4t

SMALL FRUIT INSTRUCTOR.

32 PAGES of plain directions for planting and cultivating, for family as well as market garden, and marketing all Small Fruits. Written from 20 years experience and gives all the information of the larger and more costly works, so as to put new beginners on equal footing with old fruit growers. We have hundreds of testimonials, of which the following from Rev. H. W. Beecher is a sample: "Your directions for growing Strawberries and Raspberries are the best I have ever seen." Price 10 cents. Wholesale and retail lists sent by mail free on application. Address, PURDY & JOHNSTON, Palmyra, N. Y., or PURDY & HANCE, South Bend, Ind.

jan-1f

2,000 Barrels Pure Bone Dust.

Warranted Free from Adulteration.

—:O:—
JOHN S. REESE & CO.
—:O:—

We are prepared to supply the Farmers of Maryland and Virginia with BONE DUST, which we warrant and guarantee to be free from

ADULTERATION.

This Bone Dust is not so fine as our Bone Flour, but sufficiently fine to prove active on the first crop. It is prepared in New Orleans for our sales.

We have every cargo subjected to careful chemical analysis, and thus avail of the proper means of protection for ourselves and our patrons.

JOHN S. REESE & CO.

feb-11

No. 10 South Street, (2d floor) Baltimore, Md.

New and Fresh. A Book that is Really Useful!

THE AMERICAN FRUIT CULTURIST,

Containing Practical Directions for the Propagation and Culture of FRUIT TREES in the Nursery, Orchard and Garden.

BY JOHN J. THOMAS.

SECOND EDITION. Illustrated with Four Hundred and Eighty accurate Figures. In one handsome volume of over 500 pages, and strongly and neatly bound in extra muslin. Price \$3.00.

We have read hundreds of criticisms on this book, and they unanimously pronounce it the most thorough, practical and comprehensive work published. The engravings are not copies of old cuts from other books, but are mainly original with the author.


A Standard. No Book has Superseded


The American Gardener's Assistant,

Containing Complete Practical Directions for the Cultivation of Vegetables, Flowers, Fruit Trees and Grape Vines.

BY THOMAS BRIDGEMAN,

GARDENER, SEEDSMAN and FLORIST.

A new stereotyped edition, revised, enlarged and Illustrated. In one beautiful volume of over 500 pages, handsomely bound in extra muslin, full gilt back.  Price \$2.50.

 Both of the above valuable books are sent by mail, free of postage, on receipt of the price affixed, by the publishers of this paper or by

WM. WOOD & CO., Publishers,

New York.

INTERESTING TO LADIES.

The following extracts are from the testimony, taken under oath, in a recent case pending before the United States Patent Office, upon the actual merits of the

GROVER & BAKER SEWING MACHINE,

and its relative merits as compared with other machines:

Mrs. Dr. McCready, says:

"I have used, for nine years, a GROVER & BAKER MACHINE, and upon it I have done all kinds of family sewing for the house, for my children and husband, besides a great deal of fancy work, as braiding, quilting, and embroidering. During all that time my machine has never needed repair, except when I had the tension altered, and it is as good now as it was the first day I bought it."

"I am acquainted with the work of all the principal machines, including Wheeler & Wilson's, Finkle & Lyon's, Wilcox & Gibbs, Ladd & Webster's, the Florence machines, and Sloat's machines, besides a number of ten-dollar ones; and I prefer the Grover & Baker to them all, because I consider the stitch more elastic. I have work now in the house that was done nine years ago, which is still good; and I have never found any of my friends who have used the other machines able to say the same thing

Mrs. Dr. Whiting gives the following reasons for the superiority of the Grover & Baker machines over all others:

"The elasticity of the stitch, and ripping when it is required; and also the stitch fastening itself, as you leave off; and also, the machine may be used for embroidering purposes; and therein consists the superiority over other machines.

"The stitch will not break when stretched, as the others do, and neither does it draw the work.

"I find this stitch will wear as long as the garments do—outwear the garments, in fact.

"I can use it from the thickest woollen cloth to Nansook muslin."

Mrs. Alice B. Whipple, wife of Rev. Mr. Whipple, Secretary of the American Missionary Association, testifies:

Q. As the result of your observation and experience, what machine do you think best as a general family instrument?

A. The Grover & Baker, decidedly.

Q. State the reasons, such of them as occur to you, for this opinion.

A. I think the stitch is a stronger stitch than that of any other machine I have used, and it seems to me much more simple in its management than other machines; one great advantage is the ease with which the seam is ripped when necessary to do so; and I think that the work, by an experienced person, on a Grover & Baker machine, is better than the work by such person on any other machine; it requires more skill to work other machines than the Grover & Baker.

Mrs. General Buel says she prefers the Grover & Baker machine over all others.

"On account of its durability of work, elasticity of stitch and strength of stitch. It never rips.

"It is preferred over all others; it is very easy in its movements, and very easily adjusted, and very simple in its construction.

"We can accomplish more in one week, by this sewing machine, than we can in a month by hand-sewing."

Mrs. Dr. Watts, says:

"I have had several years' experience with a Grover & Baker machine, which has given me great satisfaction. Its chief merit is that it makes a strong elastic

stitch; it is very easily kept in order, and worked without much fatigue, which I think is a very great recommendation. I am not very familiar with any other machine, except a Wheeler & Wilson, which I have had. I think the Grover and Baker machine is more easily managed, and less liable to get out of order. I prefer the Grover & Baker, decidedly."

Mrs. A. B. Spooner, says:

"I answer conscientiously, I believe it to be the best, all things considered, of any that I have known.

"In the first place, it is very simple and easily learned; the sewing from the ordinary spool is a great advantage; the stitch is entirely reliable. It does ordinary work beautifully, and the embroidery stitch. It is not liable to get out of order. It operates very easily. I suppose I can sum it all up by saying it is a perfect machine.

"I have had occasion to compare the work with that of other machines. The result was always favorable to the Grover & Baker machine."

Mrs. Dr. Andrews, testifies:

"I prefer it to all other machines I have known anything about, for the ease and simplicity with which it operates and is managed; for the perfect elasticity of the stitch; the ease with which the work can be ripped, if desired, and still retain its strength when the thread is cut, or accidentally broken; its adaptation to different kinds of work, from fine to coarse, without change of needle or tension."

Mrs. Maria J. Keane, of the house of Natalie, Tilman & Co., says:

"Our customers all prefer the Grover & Baker machine, for durability and beauty of stitch."

Mrs. Jennie C. Croly, ("Jenny June,") says:

"I prefer it to any machine. I like the Grover & Baker machine in the first place, because if I had any other I should still want a Grover & Baker; and, having a Grover & Baker, it answers the purpose of all the rest. It does a greater variety of work, and it is easier to learn than any other. I like the stitch because of its beauty and strength and because, although it can be taken out, it don't rip, not even by cutting every other stitch."

The foregoing testimony establishes beyond question:

1. The great simplicity and ease of management of the Grover & Baker machines.
2. That they are not liable to get out of repair.
3. That a greater variety of work can be done with them than with other machines.
4. That the elasticity of the stitch causes the work to last longer, look neater, and wear better, than work done on other machines.
5. That the facility with which any part of the seam can be removed when desired is a great advantage.
6. That the seam will retain its strength even when cut or broken at intervals.
7. That, besides doing all varieties of work done by other sewing machines, these machines execute beautiful embroidery.

Over one hundred other witnesses in the case above referred to testified to the superiority of the Grover & Baker machines in the points named in substantially the same language, and thousands of letters have been received from parts of the world, stating all the same facts.

Send for a Circular.

OFFICE AND SALES ROOMS,

181 Baltimore Street,

BALTIMORE.

TO THE FARMERS & PLANTERS OF THE SOUTHERN STATES !

“EXCELSIOR.”

Containing Ammonia, - - - - - 6 per cent.
Super-Phosphate equivalent to
Bone Phosphate of Lime, - - - 57 “
Potash of Soda, - - - - - 5 “

Composed of 700 pounds of No. 1 Peruvian Guano, and 1,300 pounds of *Soluble* Phosphate of lime (bones dissolved in acid,) potash and soda, forming the most concentrated, universal and durable fertilizer ever offered to the farmer and planter—combining all the stimulating properties of Peruvian Guano, and the ever durable fertilizing properties of Ground Bones—supplying an abundance of Ammonia for any crop, and all soils, and in a perfectly fixed condition—not volatile and passing off with the first crop, as with Peruvian and other ammoniacal guanoes, but stimulating the crop to which it is applied, and all succeeding ones, giving to poor, worn out and unproductive soils, new life and vigor, making them, in this respect, equal to the most highly cultivated lands, upon which much time and money have been expended.

We introduced Excelsior in 1858, and challenge the manufacturers and venders of fertilizers, natural or artificial Guano, to show results so invariably successful as can be shown from its use. One of our firm superintends in person every minutia of its manufacture. We therefore warrant every bag uniform, and to contain by analysis, the standard of fertilizing properties, giving that protection to the farmer which he does not have in the purchase of any other Guano or Fertilizer sold.

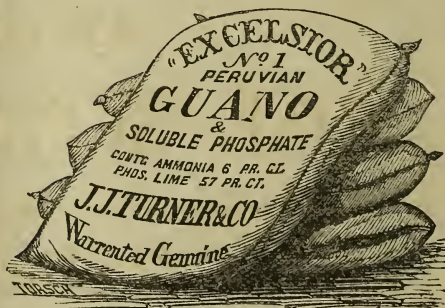
Excelsior is in fine dry powder, prepared expressly for drilling, and can be applied in any quantity per acre, however small; and it is the opinion of the most prominent and calculating Planters, after eight years experience in testing it side by side with other popular fertilizers, that an application of 100 pounds per acre of Excelsior is equal

to from 200 to 300 pounds of any other fertilizer or guano offered for sale, therefore is fully 100 to 200 per cent. cheaper.

We are daily in receipt, from every quarter, of flattering encomiums from those who used it last spring and summer on cotton, corn and tobacco, and last fall on wheat, and had we the space could publish hundreds of testimonials, many from gentlemen who have continued its use year after year since its introduction.

The best evidence we can offer of the value of our Excelsior as acrop grower and fertilizer, is the fact of its being imitated and counterfeited in this and other cities. Some unprincipled manufacturers have actually used our trade mark for the purpose of palming off their worthless compounds.

EVERY BAG BRANDED AS FOLLOWS:



Farmers should see that every bag bears in red letters the name of J. J. TURNER & CO. under the inspection mark, and thus secure the genuine article.

J. J. TURNER & CO.,

42 Pratt Street, Baltimore, Md.

DISSOLVED BONES.

(SUPERPHOSPHATE,)

PREPARED BY OURSELVES

Containing 15 Per Cent. Soluble Phosphoric Acid.

One ton is equal to three tons of any other Super-Phosphate offered for sale. In fine, dry powder for sowing or drilling in with the Grain.

 PRICE \$56 PER TON.

J. J. TURNER & CO.,

42 PRATT STREET,

BALTIMORE.

J. J. TURNER & CO.'S

AMMONIATED

BONE SUPER - PHOSPHATE,

Containing nearly 3 per cent. of Ammonia, dry and in good order for drilling. Very high encomiums have been paid its efficacy in the growth of Cotton, Corn, Tobacco and Wheat the past three years.

J. J. TURNER & CO.

42 Pratt Street, Baltimore.

SEEDS! SEEDS!! SEEDS!!!

:0:

E. WHITMAN & SONS

Are now receiving by each of the regular steamers of the Baltimore and Liverpool line
their stock of

FIELD AND GARDEN SEEDS,

Grown for them in England and on the Continent of Europe,

Which, together with their AMERICAN GROWTH OF FIELD AND GARDEN
SEEDS, will make the largest and best assortment ever offered in this market, and will
enable them to compete with any house in this country.

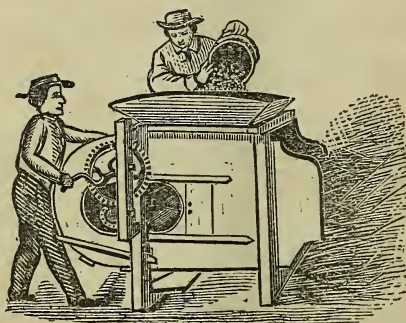
Send for circulars, and direct to

E. WHITMAN & SONS,

22 and 24 South Calvert Street, Baltimore, Md.

Montgomery's Rockaway Wheat Fans.

Awarded 115 Premiums.



8 Silver Medals.

We are the sole manufacturers of this justly celebrated FAN which has proved itself by many trials to
be superior to any other yet invented.

It has in late contests obtained premiums over several Fans claiming to be improvements over the
Rockaway, and now stands unequalled by any other Fan in the country.

Any person who has ever used one will give as good a recommendation as we could wish.

EXCELSIOR WHEAT FAN.

We have sold a great many of these Fans during the last two seasons and can recommend them as
being a good article. Having bought out the manufacturer's entire stock, consisting of over five hundred
Fans, at an exceedingly low price, we can offer them at a much less figure than at which they could
otherwise be sold.

Price.....\$30 00

E. WHITMAN & SONS,

22 and 24 South Calvert street, Baltimore, Md.

BONE DUST.

THE PURE ARTICLE ONLY.
NO ADULTERATION.

Farmers and Gardeners cannot be too careful in purchasing their Manures, as they are obliged to depend entirely on the character of the manufacturer for the quality of the article sold. None but Chemists can detect a mixture in Bone Dust.

The Subscriber has always on hand at

MARKET PRICE,

A large supply of the same kind of Bone Dust that he has been manufacturing for the last

TWENTY YEARS.

JOSHUA HORNER,

Cor. Chew and Stirling Sts.,

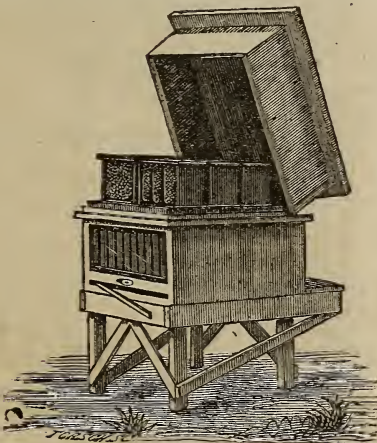
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BALTIMORE, MD.

LANGSTROTH'S

PATENT

Movable Comb Bee Hive.



Patent Extended for 7 years from Oct. 1886.

Territorial rights, and hives of the above patent, with comb guides of his own patent, and surplus honey arrangements, may be had on application to the undersigner, owner of the Langstroth patent, for the States of Maryland, Delaware and part of Ohio.

may-6t No. 77 E. Baltimore St. Balt.

N. B.—The public are cautioned against purchasing or using HIVES containing Moveable Comb Frames, which infringe in whole or in part the rights secured in the above patent.

R. C.

HENRY GIBSON,

MANUFACTURER OF

TUBULAR DRAINS,

IN GLAZED STONEWARE.

ALSO,

DRAIN TILES.

LOCUST POINT,

Baltimore.

apr-6m

"FLOUR OF BONE."

We will give a money guarantee of the purity of this article. It is pure *unsteamed, unburnt bone*, reduced to the *fineness of flour*, which adds 100 per cent. to its value. It is as *quick and active*, as acid *dissolved bone*, hence its value is vastly greater, because it contains neither acid nor water, which necessarily add weight, and reduce the quantity of valuable elements. We recommend 250 pounds to be used in place of 300 pounds Super Phosphate or dissolved bone.

JOHN S. REESE & CO.,

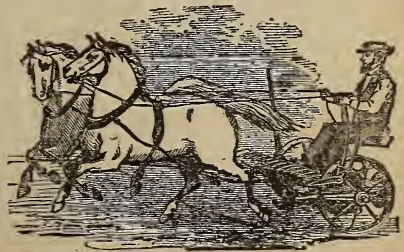
General Agents for the South,

jan-1f

71 South Street, Baltimore.

BUCKEYE MOWER & REAPER.

STILL THE CHAMPION MACHINE.



Awarded First Premiums at the most extensive Field Trials ever held in any country. Manufactured by the Incorporated Company of

C. AULTMAN & CO.

Canton, Ohio.

For circulars, &c., apply to

JAS. BRUSTER,

General Southern Agent,

may-1y 177 North street, Baltimore, Md.

IMPORTANT TO FARMERS !

SUPER PHOSPHATES.

THE MARYLAND FERTILIZING AND MANUFACTURING CO.

Incorporated January, 1867.

DIRECTORS.

WM. G. HARRISON,
LAWRENCE SANGSTON,
ROBERT TURNER,

WILLIAM NUMSEN,
RICHARD J. BAKER,
WILLIAM TREGO.

WILLIAM TREGO,
Manufacturing Chemist.

LAWRENCE SANGSTON,
President.

This Company, incorporated by the Legislature of Maryland for the Manufacture and Sale of Fertilizers, are now prepared to furnish the Agricultural community with their products.

Deriving their supply of material from the richest of the recently discovered deposits of Bone Phosphates in South Carolina, they have established, and will inflexibly maintain, a higher standard of Fertilizing value than any similar production hitherto on the market.

While the material they use contains 60 per cent. of Bone Phosphate of Lime, it is guaranteed to contain a larger per centage of SOLUBLE PHOSPHATE than any heretofore used.

FINE GROUND BONE PHOSPHATES,

Price \$30 Per Ton, in Bags.

Containing, by the average of the Analyses of Professors Piggott, Leibig and Popplein, 60.20 per cent of Bone Phosphate of Lime.

The unusual per centage of *Soluble* Phosphate will make this form very desirable to Farmers who prefer to use it in its natural state, or to manipulate for themselves.

ALKALINE SUPER PHOSPHATE, price \$50 per ton, in Bags.

This preparation has special reference to the growth and development of the Seed or Grain, and is intended for soils that produce large crops of Straw, and small crops of Grain.

AMMONIATED SUPER PHOSPHATE, PRICE \$55 PER TON, IN BAGS.

Adapted to lands that require a full development of the crop, both Straw and Grain.

TOBACCO FOOD, price \$60 per ton, in Bags.

A speciality for the Tobacco Plant, rich in Ammonia, Potash and Nitrates, but adapted to all Plants that require a prompt and vigorous growth.

The Superiority of the South Carolina Phosphate is fully demonstrated by the fact that most of the leading manufacturers of Artificial Fertilizers are now using, or making arrangements to use it, as the Phosphatic base of their preparations, and large quantities are being shipped to Europe.

The various preparations of the Maryland Fertilizing and Manufacturing Company are made under the personal supervision of a Manufacturing Chemist of thirty years' experience, and are confidently recommended to the Agricultural community.

LAWRENCE SANGSTON, President,

E. WHITMAN & SONS, SEED MERCHANTS,

Nos. 22 and 24 S. Calvert Street,
BALTIMORE, MD.

Our Stock is large with all the varieties of VEGETABLE, GRASS and FIELD SEEDS, pure, fresh and genuine. We name a few of the leading sorts :

CABBAGE.

Premium Flat Dutch and Stone-mason Drumhead, best American grown ; Early and Large Yorks, Savoy, and all other leading varieties.

BEETS.

Long Blood, E. Turnip Blood and Mangel Wurtzel and all other varieties.

CARROTS.

Long Orange, Early Horn and Altringham.

CORN.

All varieties of Early Garden Corn.

PEAS.

Extra Early, D. O'Rourke, Champion of England, Early Kent, Blue Imperial, Marrowfats, Tom Thumb, &c. &c.

RADISH.

All varieties of early and late kinds.

Turnips,
Tomatoes,
Squash and Pumpkin,
Salsify,
Cucumber,
Parsnip,
Melons,
Herbs, Flower Seeds, &c., &c.

GRASS SEEDS.

Clover,
Timothy,
Orchard Grass,
Kentucky Blue Grass,
Lucerne, Fescues,
Rye Grass,
Hungarian,
Mixed Lawn Grass,
Sorgo Seed in variety,
Bird Seeds, &c., &c.
Prince Edward Island Black Oats,
(new,) 40 pounds to the bushel,
\$2.50 per bushel.

POTATOES.

Early Rose \$1 per pound, \$5 per peck.
Early Goodrich, \$6 per bbl.; all other early and late varieties.

NAVASSA GUANO,

The only reliable source of Rich Bone Phosphate of Lime.

The attention of manufacturers of Artificial Manures and agriculturists is called to the following analysis of Navassa Guano. The fact alone of a good and increasing market having been found in Europe for this guano, whilst none of the many Phosphates for sale in this country can there find a purchaser, speaks as favorably for the richness and reliability of our guano as it is possible, and the further fact that it is the base of nearly all the well known Artificial Manures now manufactured, and the recommendation of it by such men as Prof. Voelcker, Sibson and Liebig, is sufficient guarantee to the user that by its selection he has obtained the richest Phosphatic Material extant. We guarantee the guano to contain a given amount of Bone Phosphate of Lime, to be analyzed upon arrival by any competent chemist the purchaser may select. Supplying the trade with this Guano in fine powder, packed in strong bags, containing twenty per cent. more Phosphate than any article now offered, at \$30 per ton, or crude, direct from Navassa Island, at proportionally low rates.

LABORATORY, 11 SALISBURY SQUARE, FLEET STREET.

Analysis of six samples, representing that number of cargoes, lately brought to England.

	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.
Molsture.....	13.61	2.73	5.51	7.70	8.77	13.07
Water in combination and Organic Matter.....	6.72	7.39	6.50	7.04	6.67	....
*Phosphoric Acid.....	30.88	32.48	31.85	31.98	31.23	31.64
Lime.....	32.56	31.06	37.73	35.10	37.92	37.08
Oxides of Iron, Alumina, Carbonic Acid, &c.....	13.88	20.16	16.09	15.60	13.80	16.01
Insoluble Silicious Matter.....	2.35	3.18	2.32	2.58	2.31	2.22

	100	100	100	100	100	100
*Equal to Tribasic Phosphate of Lime (bone earth)..	67.41	70.90	69.50	69.81	68.18	69.07

The commercial value of Navassa Guano, it is scarcely necessary for me to say, is mainly regulated by the amount of Phosphoric Acid which it contains. In the foregoing analysis the percentage of Phosphoric Acid was accurately determined.

AUGUSTUS VOELCKER,

Prof. of Chemistry to the Royal Agricultural Society of England.

Remarks and Analysis by Dr. Sibson, of London.

11 Eaton Terrace, St. John's Wood, Dec., 1867

Amongst the natural deposits of phosphates now at command for furnishing the constituents of our super-phosphates and other prepared manures at present so extensively consumed in our fields, that of the Island of Navassa, lately brought to notice, appears to be one of the most important. In the search for Natural Phosphates, now pretty actively prosecuted, materials of this description are sometimes found, which may possess a certain amount of scientific interest, but are of no practical importance, solely on account of their insignificant quantity. Again, a phosphate possessing almost every desirable quality, may be excluded from the market by the unfortunate fact of its percentage of Phosphate of Lime being too low. Neither of these drawbacks, however, attach to the Navassa Guano.

As I find from analyses of several cargoes lately brought to this country, that the Navassa Guano possesses a high value, I consider that it merits more than ordinary attention.

	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.
Moisture and Water of Combination.....	10.24	9.25	5.73	12.90	11.15	6.53
*Phosphoric Acid.....	32.94	32.57	33.43	32.21	31.27	33.03
Lime.....	37.91	37.34	40.15	35.13	34.90	37.20
Carbonic Acid.....	1.30	1.20	(not determined.)		1.68	1.03
Equal to Carbonate of Lime.....	2.95	2.72	3.75		2.33	
Oxide of Iron, &c.....	15.33	17.18	17.85	16.63	15.63	18.24
Insoluble Matter.....	2.25	2.46	2.84	2.13	5.17	3.98

	100	100	100	100	100	100
*Equal to Tribasic Phosphate of Lime.....	71.36	70.57	72.43	69.80	67.78	71.58

The average percentage of Phosphate of Lime, in most samples, I find to be over 70 per cent., which as an average, is higher than most Phosphatic materials now on the market.

ALFRED SIBSON, F. C. S., &c. *Royal Agricultural College, Cirencester, England.*

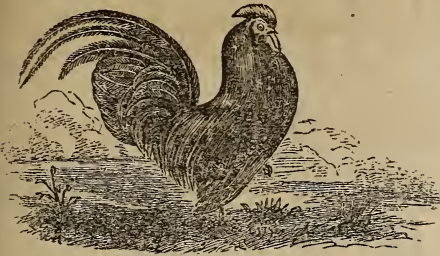
Analysis by Dr. Liebig, Baltimore, of cargoes lately imported.

Bark Savannah... June 8, 1868, containing, crude, 69.94—when dried, 76.61 per cent of Bone Phosphate of Lime.						
Brig Cyrus Fassett, " 27, 1868,	68.89	"	75.16	"	"	"
Brig Fidelia..... " 10, 1868,	68.87	"	75.44	"	"	"
Brig M. E. Banks.. May 8, 1868,	66.03	"	73.59	"	"	"
Brig Romance... June 16, 1868,	69.11	"	76.61	"	"	"
Brig E. H. Rich.. Sept. 21, 1868,	68.57	"	74.56	"	"	"
Brig Dirego..... Aug. 12, 1868,	67.00	"	75.16	"	"	"

For Sale by Navassa Phosphate Co.

R. W. L. RASIN, General Agent,

32 SOUTH STREET, BALTIMORE.



THE IMPROVED OHIO CHESTERS.

THE MODEL HOG OF AMERICA.

Enclose stamp for its description, and a variety of other Thorough-bred and Imported stock, including *Cashmere Goats, Cattle, Sheep,* and the celebrated pure *White Holland Turkey, Black Java and Creve-cœur Fowls,* with many others.

sep-tf

L. B. SILVER, Salem, O.

SAWS.

MARYLAND SAW MANUFACTORY.

HENRY C. BROWN & CO.,

Manufacturers of every Description of

CAST STEEL SAWS,

ON THE MOST APPROVED PRINCIPLE.

UHLER'S ALLEY, 1 door from Charles,

Between Lombard and Pratt Streets.

And 85 N. FRONT STREET,

BALTIMORE.

Circular, Mill, Cross Cut, Pit, Hand, and Wood Saws. Saws of every description repaired. An assortment of Saws of superior quality and of every description always on hand. *Orders executed with punctuality and dispatch.*

je-ly

GEO. W. McLEAN,

COMMISSION MERCHANT,

And dealer in

Agricultural Implements, Produce,

FERTILIZERS, &c.

COCKEYSVILLE, MD.

REFERS TO

Messrs. Jno. Merryman & Co., Baltimore Md.

" Jno. W. Ross & Co. " "

Wm. H. McLean, Esq. " "

Saml. L. Worthington, Esq., Cockeysville, Md.

Thos. L. Worthington, Esq. " "

oct-ly

NEW BRICK MACHINE.

For tempered clay—common labor only required—worked by one man—makes 500 an hour, \$110—by a horse, 800 an hour, \$300—1,200 an hour, \$400—by steam, 2,000 an hour, \$500—3,000 an hour, \$700.

DRYING TUNNEL

For drying in twenty-four hours Bricks, Fruit, Vegetables, Broom Corn, Hops, Lumber, Pea-nuts. Bricks moulded one day go into the kiln the next all the year.

HOT BLAST KILN, by which one-half the fuel is saved—220,000 bricks have been burned with 53 cords.

REVOLVING SEPARATOR, which pulverizes the clay, and frees it from stone. A piece of limestone, the size of an acorn, will burst a brick.

For further particulars, in a pamphlet (eighth edition, enlarged) giving full instructions on brick setting and burning, with wood or coal, address, *sending 25 cents,*

FRANCIS H. SMITH,

P. O. Box 556,

Baltimore, Md.

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THOMAS DAILY,

Manufacturer of



Saddles, Harness & Collars

No. 76 NORTH CALVERT STREET,

Near Pleasant St.

BALTIMORE, MD.

Just A large assortment of BITTS, STIRRUPS, GIRTHS, &c., always on hand.

Just Orders from the country promptly attended to.

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HARRINGTON & MILLS,

SUCCESSORS TO SAMSON CARISS & CO.

140 Baltimore Street,

Manufacturers and dealers in

Mantle and Pier Mirrors, Bases, Cornices,

Picture Frames,

And all descriptions of

Framing and Gilt Work, French and German Looking-Glass Plates.

Fine English, French and German ENGRAVINGS—a large stock constantly on hand.

HOUSE FURNISHING ARTICLES

in great variety.

Chandeliers and Gas Fixtures.

PLATED ALBATA Forks, Spoons, Ladles, Castors, Tea Sets, Liquor Stands, Urns, &c. Ivory and Bone Handle Table and Desert *Knives & Forks, Carvers, Steels,* Butcher and Bread *Knives, &c.*

Planned, Japan and common TIN WARE, in all its varieties.

Wooden Ware, fine and common Hardware, Baskets, Willow Ware, Door Mats, &c.

Sweep, Hand and Dust Brushes; Feather Dusters of all descriptions.

Waiters and Tea Trays, all sizes and varieties.

Devonshire Portable Carpet and Sewing Chairs, Table Mats, Napkins, Rings, Knife Boxes, &c.

Cedar Chests of all sizes.

Refrigerators of the Dr. Kane and Waterman's Pat-

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THE FARMERS' FAVORITE!

GREATLY IMPROVED.

BICKFORD & HUFFMAN'S
WORLD RENOWNED PREMIUM

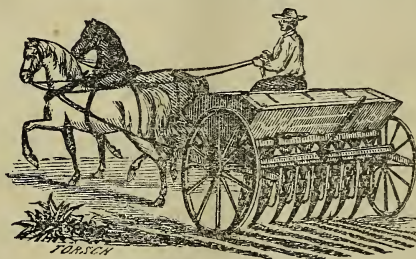
GRAIN DRILL,

WITH THE IMPROVED GUANO ATTACHMENT & GRASS SEED SOWER.

Patented April 22, 1856.

New Pat. Mar. 19, 1867

Re-Issued May 18, 1858.



OF THE

CONTINUOUS

Patented Aug. 18, 1858.

Grain Distributor.

The Desideratum of Seeders!

Perfect in Mechanical Construction!

Perfect in its Performance of Work!

Sowing all grains, from the coarsest Marrowfat Peas to the finest korneled, *with accuracy*. Thistle balls and dirt do not clog it. Seeding an even continuous stream through each tube; performing equally well up hill or down, side hill or level.

No Bunching of Grain!

No Liability to Get Out of Order or Broken!

Built as a plain Grain Drill or with Compost or Seed Attachment.

For one of these incomparable Machines, address

W. L. BUCKINGHAM, General Agent,

59½ SOUTH CHARLES STREET, BALTIMORE, MD.

PRICES---Delivered on Boat or Cars at Baltimore.

8 Tube Grain Drill,	-	-	-	\$ 85 00	9 Tube Grain Drill, with Guano or Plaster Attachment,	-	-	-	\$130 00
9 " " " "	-	-	-	90 00	Grass Seed Attachment to either of the above,	-	-	-	10 00
8 " " " " with Guano or Plaster Attachment,	-	-	-	125 00					

TERMS CASH—or endorsed Notes, due in four months, with interest.

~~The~~ The purchaser pays the Freight in all cases.

SINCLAIR & CO.

MANUFACTURERS OF

AGRICULTURAL IMPLEMENTS AND MACHINERY,
GROWERS AND IMPORTERS OF
GARDEN & FIELD SEEDS.
Nos. 58, 60 and 62 LIGHT STREET,
BALTIMORE, MD.

We have on hand the following Labor Saving Machines, which will, at all times, be old at the lowest market prices.

Viz: Patent Screw Propeller; Straw, Hay and Fodder Cutters, for both Hand and Horse Power; Patent Masticator, for Straw, Corn Stalks and Sugar Cane; Hand and Horse Power; Corn Shellers, Plantation Grist Mills, Corn and Cob Crushers, Hay Presses, Sugar Cane Mills, Lime Spreaders, Horse Powers and Thrashers, Wheat and Rice Fans, Plows, Harrows, Cultivators, &c., &c.

PLOW AND MACHINE CASTINGS.

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R. SINCLAIR & CO.

Pennsylvania Agricultural Works,

Factories, Planing Mill, Foundry and Lumber Yard,
NORTH DUKE STREET, NEAR THE DEPOT,

YORK, Pennsylvania.

A. B. FARQUHAR, Manager & Proprietor.

Agricultural Implement Department

Is one of the largest in the country, and is supplied with Steam Power and every facility for manufacturing, with all the latest and most improved MACHINERY, TOOLS, PATTERNS, FOUNDRY, and LUMBER YARD. With these advantages for manufacturing and supplying Farmers and Dealers, I respectfully solicit their orders, confident of giving perfect satisfaction. I would respectfully call the attention of the public to my Polished Steel Plows, Cultivators, Pelton Triple Geared Horse Powers, Reapers & Mowers, Thrashers and Cleaners, Spring Tooth Horse Rakes, &c. &c.

CULTIVATORS.

Made of the best white oak, with 5 or 6 polished steel Plain or Reversible Teeth. It is adjustable to any required width and depth, and the teeth being like the plow, of polished steel, clean themselves readily and cut the weeds and briars instead of passing over them. It is much more satisfactory, and, because more durable, cheaper than the old style.

Special attention paid to supplying the trade with every variety of STEEL WORK—Cultivator Teeth, Plow Moulds, &c., &c. febl-ly

Threshing & Separating Machines

For Separating, Cleaning and Bagging Grain, at one operation.

This machine has been in use for about 10 years, some of them having threshed more than a hundred thousand bushels grain, and owing to its strength, simplicity and completeness of its operations, is *universally acknowledged to be the Best in Use*. It is the only machine that bags the grain clean enough for market. Being provided with a self-regulating blast and other improvements for saving all the grain, it will pay for itself, over any other Separator, in a few years.

HORSE POWERS.

I am manufacturing the celebrated PELTON TRIPLE GEARED HORSE POWER of all sizes, 3 to 10 horse. The Castings are made in my own Foundry, of the very best Iron, and I will warrant this Power to run easier and bear double the strain of any other in use.

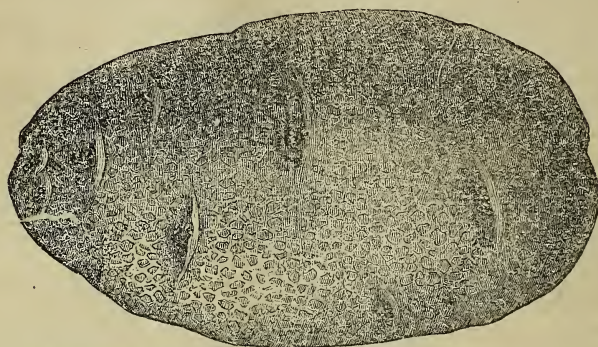
PLOW HANDLES.

Having an Improved Blanchard Lathe and other machinery for manufacturing Plow Handles on a large scale I can supply the trade with all varieties of No. 1 Plow Handles at the shortest notice.

SEED! SEED! SEED!

Farmers and Gardeners of Maryland and the Southern States will find at our Warehouse every variety of FIELD AND GARDEN SEEDS adapted to Southern cultivation.

E. WHITMAN & SONS, 22 and 24 S. Calvert Street, Baltimore.



Early Rose Potatoes.

We have succeeded in securing a few barrels of this justly celebrated Potato, which has created so much excitement in the community. Those we have are pure and genuine, and we will sell them at New York and Boston prices, viz: 1 pound for \$1, or \$5 for one peck.

We notice reports, from parties who planted the ROSE POTATO last year, of a yield of one barrel from one pound planted, and that one hundred per cent. is quite common. Address, E. WHITMAN & SONS, 22 and 24 S. Calvert Street, Baltimore, Md.

PRINCE EDWARD ISLAND BLACK OATS.

Just received and for sale. Price \$5 per sack of two bushels. Weight 40 pounds to the bushel. Address, E. WHITMAN & SONS, 22 and 24 South Calvert Street, Baltimore, Md.

FERTILIZERS.

The Fertilizer recommended by the farmers of Maryland and Virginia as the best and cheapest is ANDREW COE'S SUPER-PHOSPHATE. Price \$60 per ton of 2,000 pounds. For sale by E. WHITMAN & SONS, 22 and 24 South Calvert Street, Baltimore, Md.

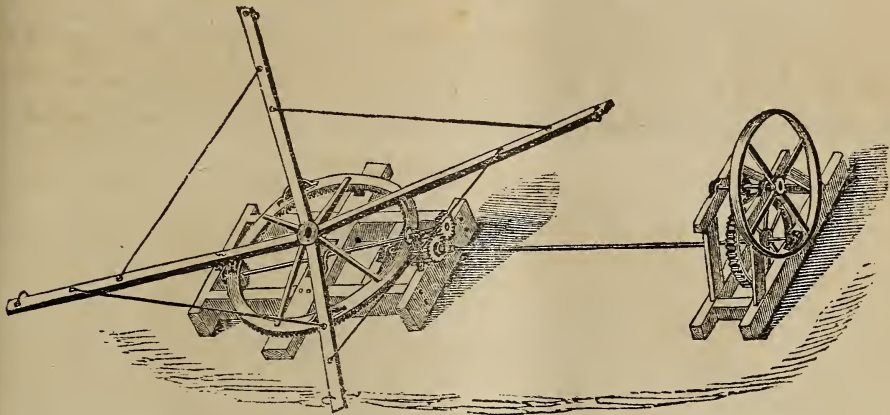
GROUND BONE

Is recommended as an excellent Fertilizer. Price \$45 per ton of 2,000 pounds.
For sale by

E. WHITMAN & SONS,

22 and 24 SOUTH CALVERT STREET, BALTIMORE, MD.

Horse Powers and Threshing MACHINERY.



WHITMAN & SONS' DOUBLE GEARED POWER.

Among the great variety of Horse Powers now in use in our country, there is none more simple or more durable than this. It runs lighter and will do more work, with the same number of Horses, than any machine in use, and we can confidently recommend it as the best and most desirable machine in the market.

PRICES.

Whitman's Double Geared Horse Power, (the most substantial power made,).....	\$175	Whitman's Two Horse Railway Power.....	175
Pelton Triple Geared Power, 10 horse.....	125	“ One “	140
“ “ 8 “	120	“ 24 Inch Premium Iron Cylinder Thresher ..	80
“ “ 6 “	110	“ 20 “ “ “	70
“ “ 4 “	90	Straw Carrier for either size Thresher.....	25

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GROWN AT

AZADIA VINEYARD,

NEAR WASHINGTON, D. C.

A large stock of splendid one and two year old GRAPE VINES of the following varieties: Adirondac, Delaware, Concord, Iona, Rogers' Hybrids, Salem, &c. These vines are layers, and one and two eye cuttings, grown in the open air.

These vines and grape wood will be sold very low. For further particulars apply to

Dr. JOHN B. KEASBEY,
may-ly 312 F Street, Washington, D. C.

10,000 CONCORD LAYERS,

2 YEARS OLD FOR \$400.

Address GRANVILLE S. PERRY,

oct Georgetown, Conn.

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Advertising Agents

No. 40 Park Row, New York.

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THE MARYLAND FARMER,

and the most influential and largest circulating Newspapers in the United States and Canadas.— They are authorized to contract for us at our lowest prices. nov-tf



PURE BRED FOWLS

AND

Chester White Pigs.

Wholesale and Retail Price List sent free.

Address J. D. RICHARDSON & CO.

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Buckeystown, Md.

ATTENTION
TOBACCO PLANTERS, FARMERS,
AND
VEGETABLE RAISERS!

WILSON'S
AMMONIATED SUPERPHOSPHATE & LIME
AND
WILSON'S TOBACCO GROWER.

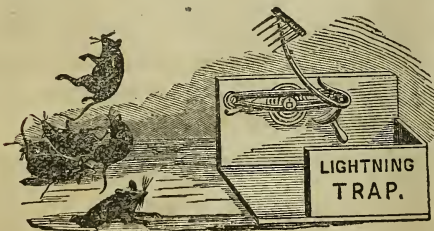
The Cheapest and Best Fertilizer in the Country.

It has raised good crops of Wheat, Corn, Oats, Potatoes, Grass, Tobacco and Vegetables of all kinds. We have certificates which we can show and refer to those who have used it, but the best certificate of any fertilizer is the experience and trial of the farmer, its effects upon the crops, and the soil observed, as he and neighbors use it year after year; any fertilizer that will continue to stand this test may be safely pronounced to be good. We believe this has genuine merit in it. We think it will stand the above test—the only one that is of any value—and we are willing to abide the result. Give it a trial.

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SOLE AGENTS,

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To sell the **LIGHTNING TRAP**, a new and wonderful invention. It is first wound up like a clock; then it kills Rats, Gophers, Squirrels, Mice, &c., throws them away, and sets itself as quick as its name indicates. One trap and terms to agents will be sent by express on receipt of one dollar.

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1 pound, \$1. 3 pounds, \$2. 2 dozen Clarke Raspberry Plants, and 1 pound Early Rose Potatoes, \$6. Can be sent by mail to any part of the United States.

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Have this day opened their new stock, comprising
CHRONOMETER WATCHES,

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We also offer

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Made on purely scientific principles, and considered the best timekeeper now for sale in the country.

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ICE PITCHER,

The very best Pitcher now in use.

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HAIR JEWELRY manufactured to order at short notice.

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The Grafton Mineral Paint Co. are now manufacturing the Best, Cheapest and most Durable PAINT in use; two coats well put on, mixed with pure Linseed Oil, will last 10 or 15 years; it is of a light brown or beautiful chocolate color, and can be changed to green, lead, stone, drab, olive or cream, to suit the taste of the consumer. It is valuable for Houses, Barns, Fences, Carriage and Car Makers, Pails and Woodenware, Agricultural Implements, Canal Boats, Vessels and Ships' Bottoms, Canvas, Meta and Shingle Roofs. (it being Fire and Water Proof,) Floor Oil Cloths, (one Manufacturer having used 5,000 barrels the past year), and as a paint for any purpose is unsurpassed for body, durability, elasticity and adhesiveness. Price \$6 per barrel of 300 pounds, which will supply a farmer for years to come. Warranted in all cases as above. Send for circular which gives full particulars. None genuine unless branded in a trade mark *Grafton Mineral Paint*. Address

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And Labor-Saving Machines of all kinds.

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A full supply of **RIDING PLOWS, GANG PLOWS, Steel Plows, Cast Iron Plows, Double Shovels, Harrows, &c.** Takes orders for Grain Drills, Reapers and Mowers of the latest and most approved patterns, Threshing Machines, etc., etc. Also, **SEEDS AND FRUIT TREES.**

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SOLUBLE PACIFIC GUANO.

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The value of this Guano is now so *well known and appreciated*, that it does not require further commendation from us.

The Company *owns the Guano Islands*, and other *sources of supply* from which its raw material is drawn. Hence, this Guano, possessing such high excellence, can be brought into market at a price *not exceeding* that of the ordinary Super-Phosphates of Lime.

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Experience has shown that this Guano ripens the Wheat crop from five to six days earlier than the Super-Phosphates.

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The Great Remedies for all Diseases of the Liver, Stomach or Digestive Organs.

HOOFLAND'S GERMAN BITTERS

is composed of the pure juices (or, as they are medicinally termed, *Extracts*) of Roots, Herbs and Barks, making a preparation highly concentrated, and entirely free from alcoholic admixture of any kind. This high concentration renders the Bitters, to those having a natural antipathy to bitter substances, rather unpalatable. To overcome this difficulty was compounded, as being the most palatable,

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The stomach, from a variety of causes, such as Indigestion, Dyspepsia, Acute or Chronic Inflammation or Irritation of the mucous coat, Nervous Debility, etc., is very apt to have its functions deranged. The Liver, sympathizing as closely as it does with the Stomach, then becomes affected, the result of which is, that the patient suffers from several or more of the following diseases: Constipation, Flatulence, Inward Piles, Fullness of Blood to the Head, Acidity of the Stomach, Nausea, Heartburn, Disgust for Food, Fullness or Weight in the Stomach, Sour Eructations, Sinking or Fluttering at the Pit of the Stomach, Swimming of the Head, Hurried or Difficult Breathing, Fluttering at the Heart, Choking or Suffocating Sensations when in a Lying Posture, Dimness of Vision, Dots or Webs before the Sight, Dull Pain in the Head, Deficiency of Perspiration, Yellowness of the Skin and Eyes, Pain in the Side, Back, Chest, Limbs, etc., Sudden Flushes of Heat, Burning in the Flesh, Constant Imaginings of Evil, and Great Depression of Spirits.

The sufferer from these diseases should exercise the greatest caution in the selection of a remedy for his case, purchasing only that which he is assured from his investigations and inquiries possesses true merit, is skilfull compounded, is free from injurious ingredients, and has established for itself a reputation for the cure of these diseases. In this connection we would submit those well-known remedies—

Hoofland's German Bitters and Hoofland's German Tonic.

Prepared by

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CAUTION.

Hoofland's German Remedies are counterfeited. See that the signature of C. M. JACKSON is on the wrapper of each bottle. All others are counterfeit.

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~~Do~~ Do not forget to examine well the article you buy, in order to get the genuine.

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